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OF THE

BRITISH SCHOOL AT ATHENS

No. XXXII.

SESSION 1931–1932

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GROUPS OF MID-SIXTH-CENTURY BLACK-FIGURE

(Plates 1–11)

The title calls for a word of explanation. I use 'mid-sixth-century black-figure' as a convenient term for the vases made not only in 550 B.C., but in the decade or so before and the two decades after the middle of the century: the work of Lydos, Exekias, the Amasis painter, and their contemporaries. I shall not say much about the cups of the period, for I have already dealt with the chief sort, the 'little-master cups,' elsewhere (*JHS.* 52, pp. 167–204). The shapes we shall be mainly concerned with are the amphora, the neck-amphora, and the hydria; which, with the cup, are the dominant shapes in this and the succeeding phase of black-figure. My order will be not strictly chronological, but not quite arbitrary either.[1]

I. Exekias.

It is natural to begin with Exekias, who is comparatively well known, has equals but few if any superiors among black-figure painters, and is certainly one of the 'classical' exponents of the art. I do not repeat the list I gave of his works in *ABS.* (pp. 17–21 and pp. 29–31): but I have corrections to make, and additions. I detach my nos. 1 and 2, the Berlin amphorae 1699 and 1698: they are very close to Exekias; but I now place them in my 'group E': see below, pp. 3–8. Next, I correct my description of the New York vase my no. 18: it is a neck-amphora, not a psycter-neck-amphora.

On the inscription of the London neck-amphora B209 see *JHS* 49, p. 130, and Dugas in *Mélanges Glotz*, pp. 335–40.

Then the additions. Fragments of a neck-amphora found at Montlaurès in Provence, and preserved in the museum at Narbonne, were rightly assigned to Exekias by Jacobsthal (*AA* 1930, p. 226, figs. 11–12: Apollo between Artemis and Leto; below, lionesses and goats; what remains of the shoulder-picture seems from the photograph to be a male foot).

[1] Abbreviations: *ABS* = Beazley, *Attic Black-figure: a Sketch;* Hoppin = Hoppin, *Handbook of Greek Black-figured Vases;* Pfuhl = Pfuhl, *Malerei und Zeichnung der Griechen.*

I owe my thanks to Marchesa Isabella Guglielmi di Vulci, and to Captain E. G. Spencer-Churchill, for kindly allowing me to publish vases in their collections; and to Dr. L. D. Caskey, Mr. A. O. Curle, Prof. R. Delbrück, Mr. A. Dieudonné, Prof. C. Dugas, Mr. E. J. Forsdyke, Mr. de Genlis, Dr. F. J. Mather, Mr. A. Merlin, Dr. H. Möbius, Dr. J. Sieveking, vases in Boston, Edinburgh, Bonn, the Cabinet des Médailles, Montpellier, London, Boulogne, Princeton, the Louvre, Cassel, and Munich.

Of the beautiful amphora in Philadelphia with the dead Antilochos and the dead Achilles (*Mus. Journ.* 6, pp. 91–2) I said that it had been attributed by Furtwängler to Exekias and might well be from the painter's own hand (*ABS* p. 30). From photographs kindly sent me by Mrs. Dohan I see that it is certainly by Exekias himself.

There is another splendid amphora by Exekias in the same collection, 4873, which has on one side a hoplite letting his horse graze, on the other an archer doing the same. The archer side is figured in *Mus. Journ.* 4 p. 158. Exekias delighted in horses, and has left several unusual pictures of them.

II. Manner of Exekias.

Now three amphorae which I do not ascribe to Exekias himself, but which are very close to him. The citharode-vase in Philadelphia should be by the same hand as the psycter-amphora Naples Santangelo 38, no. 3 in my *ABS* list ('school-piece'?): compare especially the seated figures. The Boulogne vase is very like the Villa Giulia, and the seated figure connects the Villa Giulia vase with those in Naples and Philadelphia.

Amphora.

(Handles and foot are modern, and I do not know whether it is possible to be certain that the amphora was of type B rather than type A.)

1. Philadelphia, from Orvieto. *Mus. Journ.* 4, pp. 151–2. On each side, a citharode (on B, alone; on A, between two seated listeners).

Amphora type B.

2. Boulogne. B, Pl. 1, 1. A. Ajax with the body of Achilles. B, victorious athlete. A bearded and portly athlete—wrestler or boxer—is followed by a boy carrying the prize tripod on his head: the two correspond to the left-hand figure on B, and the third figure on A, of the next vase. Small.

Amphora type A.

3. Villa Giulia 8340, from Nepi. *CVA* pl. 17, 1–2. Victorious athletes.

The influence of Exekias was naturally widespread, and a good many vases might be said to be 'in his manner,' or even to 'belong to his school.' Here are one or two examples.

Neck-amphorae.

1. Naples 2498, from Etruria. A, tiny phot. Sommer 11073, i, 3. Each, wedded pair in chariot. Below, animals. On the shoulder, animals (on A, sphinxes between cock and lion; B, cocks and hens).

2. Perugia 76. A, Theseus and the Minotaur. At each handle, Nike. On the shoulder, A, athletes. I have not seen B.

Amphorae type B.

3. Geneva. Phots. Giraudon. A, Theseus and the Minotaur. B, Menelaos and Helen. I have no note of the vase. There is evidently a good deal of restoration.

4. Louvre F33. *CVA* pl. 15, 4 and 7; A, phot. Alinari 23705. A, Theseus and the Minotaur. B, Herakles and the Lion. The base-rays have been painted over. For B Langlotz compares the Würzburg amphora 263 (Langlotz pl. 62, pl. 80, and pl. 84).

III. Signatures of Exekias.

Before turning to 'Group E,' a word about the signatures of Exekias. Eleven vases bear his signature: ten of them are given, not very accurately, by Hoppin, pp. 91–108: corrections, *ABS* p. 17, and *JHS* 52, pp. 178, 180, 185: the eleventh, *JHS* 52, p. 183. In the fragment of an amphora (amphora? or neck-amphora? I have not seen it) formerly in Klein's possession (Klein, *Meist.* p. 40, no. 6, whence Hoppin p. 108), the predicate is missing; in eight of the other vases it is *epoiesen*, in two *egrapse kapoiese*. Of the eight *epoiesen* vases two—the London neck-amphora and the Munich eye-cup—are by the same hand as those with *egrapse kapoiese*. In five others—the four little-master cups (see *JHS* 52, pp. 178, 180, 183, 185, 200) and the dinos—the decoration is so slight that one can hardly be sure whether they are by the same hand as the four or not. There remains the amphora in the Louvre, which I place, not in my list of vases painted by Exekias, but, as will be seen, in 'Group E.'

IV. Group E.

This is the name I give to a large and compact group which is very closely related to the work of Exekias, though earlier (as is shown, for example, by the shape of the amphora, and the type of horse) than the vases assigned to him in my list. I count the Louvre amphora with *Exekias epoiese* as belonging to this group, although it has peculiarities and is not an absolutely typical specimen. One day we may be able to draw the cords still tighter, and to establish the Louvre amphora, and group E or part of it, as early work of Exekias himself: for the present I prefer to keep the two groups distinct. 'E' alludes to the connection with Exekias; and group E is, if not more, the soil from which the art of

Exekias springs, the tradition which, on his way from fine craftsman to true artist,[1] he absorbs and transcends.

Most of these vases will be by one hand.

Amphorae type B.

1. Würzburg 245, from Vulci. Langlotz pl. 79. A, Herakles and Geryon. B, Herakles and the Lion. Langlotz rightly connected this with our no. 10.

2. Toronto 300, from Tarquinii. Robinson pl. 35 and p. 18. A, Herakles and the Lion. B, chariot turning. Robinson rightly connected this with our nos. 3 and 14.

3. London B 160. *CVA* pl. 28, 1; B, *JHS* 18 p. 274. A, wedded pair in chariot. B, Herakles and the Lion. Modern in B, the lower half of Athena's face with her nose, mouth and r. foot of Herakles, mouth and waist of Iolaos.

4. Munich 1382 (J. 645), from Vulci. Micali *Storia* pl. 80, 2; A, *El. cér.* 1 pl. 60. B, Pl. 1, 2. A, birth of Athena. B, Herakles and the Lion. A is much restored.

5. Rome, Conservatori. A, Theseus and the Minotaur; B, Herakles and the Lion. Miss Mary Wynn Thomas kindly supplemented my notes on this vase.

6. Würzburg 248. Langlotz pl. 84 and pl. 80. A, Theseus and the Minotaur. B, Herakles and the Lion.

7. Würzburg 251. Langlotz pl. 79. A, hoplites and mounted hoplites. B, hoplites and a youth and a man.

8. Würzburg 244, from Vulci. Langlotz pl. 79. A, hoplites and horsemen. B, chariot turning.

9. Munich 1397. A, Theseus and the Minotaur. B, Herakles and the Lion.

10. Vatican 348, from Vulci. *Mus. Greg.* ii pl. 47, 2; Albizzati pl. 44. A, arming. B, Herakles and the Lion.

11. Munich 1396 (J. 1114), from Vulci. A, chariot. B, frontal chariot.

12. Munich 1380 (J. 617), from Vulci. A, Ajax and Cassandra. B, frontal chariot.

13. Paris market. *Coll. B. et C.* pl. 18, 149. A, Theseus and the Minotaur. B, frontal chariot.

14. Copenhagen inv. 7068, from Thebes. *CVA* pl. 102, 1. A, Herakles and the Lion. B, Dionysos and silens. The right-hand silen is not, I think, making a gesture of disgust, as Blinkenberg suggests, but simply spinning round in the dance: cf. our nos. 15, 16, and 23.

[1] Pfuhl, *Meisterwerke* p. 17 = *Masterpieces* p. 27 near the top.

15. Louvre F 32. *CVA* pl. 14, 8, pl. 15, 2, and pl. 16, 3. A, birth of Athena. B, Dionysos and Ariadne with silens.

16. Louvre F 55. A, Pottier pl. 67; *CVA* pl. 15, 6 and 9. A, Herakles and Geryon. B, Dionysos and silens.

17. Chiusi 1806, from Chiusi. A, battle (with chariot). B, Dionysos and Ariadne with silens.

18. Würzburg 247, from Vulci. Gerhard *AV* pl. 266; A, Pfuhl fig. 298: Langlotz pl. 84 and pl. 67. A, warriors leaving home. B, Herakles and the Lion.

Fig. 1.—Rome, Marchesa Isabella Guglielmi di Vulci.

19. Brussels R 289. A, Herakles and Geryon. B, Herakles and the Lion.

20. Copenhagen 109, from Vulci. *CVA* pl. 101, 2. A, battle (with chariot). B, victor with tripod.

21. Rome, Marchesa Isabella Guglielmi, from Vulci. A, fig. 1. A, victor with tripod. B, chariot turning. A is a replica of B in Copenhagen 109.

22. Compiègne 1050, from Vulci. A, Theseus and the Minotaur. B, frontal chariot.

23. London B 163, from Vulci. Gerhard *AV* pl. 324 (bad drawing); *CVA* pl. 29. A, Herakles and the Birds. B, two women in one cloak, between silens.

24. Boulogne 420. A, *Le musée* 2, p. 268, fig. 11. A, Herakles and the Birds. B, Herakles and the Lion.

25. Naples 2725, from Etruria. A, Herakles and Geryon. B, Dionysos and silens.

26. New York, Mr. Albert Gallatin. A, Ajax and Cassandra. B, Theseus and the Minotaur.

27. Tarquinia RC 7170, from Tarquinii. A, Theseus and the Minotaur. B, chariot turning.

27 *bis*. Boulogne 88. A, Theseus and Minotaur. B, Dionysus and dancing silens.

28. Boulogne 90. A, Theseus and the Minotaur. B, horsemen.

29. Munich 1394 (J. 1116). A, Dionysos and silens: B, Ariadne and silens.

30. Tarquinia 621, from Tarquinii. A, chariot. B, Herakles and Geryon.

Amphora type B.

(But the foot is abnormal—same shape as in the amphorae type A nos. 32–35, q.v.)

31. Louvre F 53, from Vulci. *WV* 1888 pl. 5, 1, whence Hoppin *Bf* p. 101; *CVA* pll. 19–20; the lid, phot. Giraudon 17465. A, Herakles and Geryon. B, chariot. On the lid, sirens and stags. Εχσεκιαςεποιεσε, Στεσιαςκαλος, and other inscriptions. The vase is very dirty. There is more repainting than Pottier gives.

Amphorae type A.

These five differ from all other amphorae of type A in the foot. In nos. 32–5 it is a trochilos, without base-fillet—the same foot as in the signed Louvre amphora (type B), our no. 31. In 32–3 the profile of the foot is reserved, in 34–5 black as in the Louvre vase. 36 has the echinus foot, without fillet, of the amphora type B.

The decoration of the handles is also unusual: in nos. 32, 35, and 36, rosettes; in no. 33 rosettes on one side of each handle, and an uncommon variety of ivy on the other; in no. 34, chequers. In nos. 35 and 36 the broad of the handle, instead of being flat with flanges, and plain black, is concave, with floral decoration. The same two vases have double rays at the base in lieu of the ordinary single.

32. Berlin 1699. B, Stephani, *Theseus und Minotauros*, pl. 3. A, birth of Athena. B, Theseus and the Minotaur. On the mouth, lions and bulls. Much restored, especially B.

33. Berlin 1698, from Vulci. Gerhard *ECV* pll. 22–23; A, Pfuhl fig. 277. A, Ajax and Cassandra. B, Theseus and the Minotaur. On A, Πολυχσενε, Ανθιλοχος, Αι[ας], Αθεναια, γλαυχς, Σκαμανδροφιλος, Στεσιαςκα[λος]. On B, Θεσευ[ς], Αριαγνε, and unmeaning inscrr. The surface is damaged: the restorations are given by Furtwängler.

34. London B 205, from Vulci. *CVA* pl. 43, 2. A, death of Priam. B, Theseus and the Minotaur.

35. London B 194, from Vulci. *CVA* pl. 37, 1; A, *BM Vases* ii pl. 4. A, Herakles and Geryon. B, chariot turning. Walters does not give the restorations: on A, most of Herakles' r. arm and of his sword-blade, nearly all the hithermost arm of Geryon; on B, most of the driver's face, and parts of three horse-heads.

36. Cassel T 384, from Italy. Pl. 2. A, Herakles and the Lion. B, arming.

Neck-amphorae.

Nos. 37–40 form a group: the same proportions, mouth (with red offset lip), foot (torus without base-fillet), patterns. The drawing is slighter than in the amphorae. I have not seen no. 40: in most things it seems to go with the other three.

37. Northwick Park, Capt. E. G. Spencer-Churchill. Fig. 2 and Pl. 3. On each side, Herakles and the Lion: at each handle, horseman setting out. On the shoulder, Herakles and the Centaurs.

38. Munich 1471 (J. 476). Gerhard *AV* pl. 256–7, 3–4; side-view, Jacobsthal *Orn* pl. 15, a. A, hoplitodromoi; B, runners; at the handles, the prizes. On the shoulder, each, Herakles and the Lion.

39. Berlin 1716, from Orvieto. Jacobsthal *Orn.* pl. 37, *c*, and pl. 36, a. A, chariot driving into battle. B, horseman with spare horse. On the shoulder, each, wrestlers.

40. Tarquinia, from Tarquinii. *NSc* 1924, pp. 416–7. A, hoplites between horsemen. B, hoplites and men. On the shoulder, each, lions attacking a bull.

Neck-amphora.

41. Tarquinia 623, from Tarquinii. Phots. Moscioni 9090–1. The picture runs right round the vase. Gigantomachy. Below, animals. The drawing is more elaborate than in nos. 37–40, and vividly recalls Exekias.

Amphorae type B.

The following may also be reckoned to group E, although they stand a little apart from the foregoing.

1. Vatican 353, from Cervetri. *Mus. Greg.* ii pl. 48, 2; A, phot. Rom. Inst. 7601 = *AM* 41 pl. 17; Albizzati pl. 45. A, chariot. B, birth of Athena. The white mostly repainted.

2. Athens, Acr. 821, frr., from Athens. Graef pl. 50. Each, chariot. Cf. the last. Large.

Fig. 2.—Northwick Park, Capt. E. G. Spencer-Churchill.

3. Vatican 347, from Cervetri. *Mus. Greg.* ii, pl. 48, 1; Albizzati pl. 43 and p. 135. A, fight (with chariot). B, Herakles and Geryon. The white mostly repainted.

An amphora in the Saint-Ferriol collection at Uriage might belong to our group (A, *Mon. Piot* 20 p. 96–7: A, Herakles and Geryon. B, Dionysos and Ariadne with silens). I have not seen it. Boucher compares it with our no. 35.

V. Group of London B 145.

Four neck-amphorae of no great size or importance, connected by proportions; details of shape; decoration; drawing.

Neck-amphorae.

1. London B 145, from Vulci. *CVA* pl. 5, 1. A, Athena. B, gigantomachy.

2. London B 251, from Vulci. *CVA* pl. 62, 1. A, gigantomachy; B, combat.

3. Compiègne 976, from Vulci. *CVA* pl. 5, 1 and 8. A, battle (like A of the two last, but not characterised as a gigantomachy). B, two horses rearing and a fawn.

4. Berlin 1719, from Nola. The palmettes, Jacobsthal *Orn.* pl. 24, b. A, combat. B, chariot, turning.

VI. The Painter of Vatican 365.

Amphora type A.

1. Vatican 365, from Cervetri. *Mus. Greg.* ii pl. 50, 1; Albizzati pl. 50. A, gigantomachy. B, combat. The foot is of the normal shape, but without base-fillet.

Amphora type B.

2. Civitavecchia, Marchese Benedetto Guglielmi di Vulci, 18, from Vulci. A, Herakles and Geryon. B, horseman.

Neck-amphorae.

3. Edinburgh 81. 44–27. Gerhard *AV* pl. 129. Pl. 4. A, Herakles and Cerberus. B, warriors and a woman (Menelaos and Helen?).

4. Altenburg 211. A, Ajax with the body of Achilles. B, Theseus and the Minotaur.

Hydria.

5. Philadelphia, fragments, from Orvieto. Warrior mounting chariot. Below, hoplites and horsemen. On the shoulder, a horseman, a woman, and part of a male, remain.

VII. The Painter of Cambridge 47.

Three neck-amphorae, all of special shape. The first two are companion pieces, the third is of another type.

Neck-amphorae.

1. Cambridge 47, from Vulci. *CVA* pl. 10, 2; side-view, Jacobsthal *Orn* pl. 27, *b*. A, Ariadne and dancing silens. B, the like.

2. Civitavecchia, Marchese Benedetto Guglielmi di Vulci, 70, from Vulci. Each, maenad and silens dancing.

3. Munich 1468 (J. 1336). The shoulder-pictures, *JHS* 25 pl. 12, *ab*. A, man courting boy. B, frontal chariot. On the shoulder, each, wrestlers.

VIII. The Painter of Berlin 1686.

In *CVA* Oxford, p. 98, I attributed four vases to the painter of the amphora Berlin 1686: the list can be increased to eleven. The artist has a good touch, and his figures have a pleasant rigidity which makes his vases look older than those of group E, with which they must be contemporary, his Philadelphia amphora, to take one example, with Berlin 1699.

Amphorae type B.

1. Berlin 1686, from Vulci. Gerhard *TG* pll. 2–3; A, Petersen *Athen* p. 46. Feast of Athena: A, the goddess, her priestess, a man and two youths with a cow; B, the flute-players and the cithara-players.

2. Oxford 1918. 64. *CVA* pl. 4, 3, and pl. 5. Each, Theseus and the Minotaur.

3. Cabinet des Médailles 207, from Vulci. Luynes pll. 11–12; *CVA* pl. 34, 3–5. A, warriors: leavetaking, arming. B, fight.

4. Bologna PU. 192, from Vulci. *CVA* pl. 4, and pl. 5, 1–2; B, Pellegrini *VPU* p. 26. A, Herakles and Kyknos. B, Herakles and the Amazons.

5. Würzburg 246, from Vulci. Langlotz pl. 66. A, Herakles and Geryon. B, Dionysos and Ariadne with silens and a maenad.

6. Würzburg 249. Langlotz pl. 70, pl. 84, and pl. 80. A, Ajax and Cassandra. B, Dionysos and silens.

7. Munich 1401 (J. 471), from Vulci. A, Dionysos and Ariadne with three votaries. B, warrior ready to set out.

8. Berlin 1697, from Cervetri? Panofka *Parodien* pl. 1, 4–5; A, Bieber *Theaterwesen* pl. 66 and Pickard-Cambridge *Dithyramb* p. 246. A, chorus of 'Knights.' B, silens and maenad.

Amphora type A.

9. Philadelphia, from Orvieto. *Mus. Journ.* 3, pp. 69–71. A, birth of Athena. B, Zeus seated with a goddess, and other deities (the seated goddess is called Athena by Mrs. Dohan, but I suppose Hera is also possible: the picture is fragmentary).

Amphora (of special type?).

I know this vase from photographs kindly sent me by the director of the National Museum at Washington. One handle is modern, the other is as in the amphora type B. Foot and mouth look suspicious, for the shapes are not what one would expect; but I cannot be sure from the photograph that they are either modern or alien. The foot seems to be something like that of the four amphorae type A in group E (pp. 6–7 nos. 32–5); unless it be a simple torus: the side of it is reserved. The mouth is convex, rather like a neck-amphora mouth.

10. Washington. A, Pl. 5, 1. A, victorious athlete. B, warrior leaving home? Modern in A, part of the camp-stool and of the chiton beside it; part of the victor's r. hand; nose, mouth, chin, neck, of the tripod-bearer. In B, the two left-hand figures are modern, of the third figure all but the hand with part of the caduceus; the r. leg of the fourth, the l. leg from the knee down, most of the shield; the dog except the tail; the feet of the fifth figure.

Neck-amphora.

11. Paris market. *Vente* 11–14 *mai* 1903, pl. 2, 1 and 5. A, death of Priam. B, Hermes, Athena, Herakles (Herakles on the way to Olympus). Below, lionesses and fawns. On the shoulder, each, the Calydonian Boar.

IX. The Painter of London B 197.

London B 197 is one of the earliest amphorae type A: it is a big handsome vase, and the painter, although I know but one other work of his, deserves a section to himself.

Amphorae type A.

1. London B 197, from Camiros. *BM Vases* ii, pll. 5–6; *CVA* pl. 38, 1, and pl. 41, 1. A, wedded pair (Peleus and Thetis) in chariot. B, Herakles and Kyknos. The foot is of normal type, but there is no base-fillet. The handles are decorated with rosettes.

2. Orvieto, Conte Faina, 73, from Orvieto. A, Herakles and Triton. B, youth mounting chariot. The foot is lost. The handles have the usual ivy-pattern.

X. The Painter of Louvre F 51.

Neck-amphora.

1. Providence 13. 1479. A and side-view, Jacobsthal *Orn.* pl. 19, *a–b*; *CVA* pl. 9, 1. A, a man with a dog and a boy with a pair of cocks. B, similar. For the subject, see p. 15.

Hydriai.

2. Louvre F 51, from Etruria. Pottier pl. 67; *CVA* pl. 67, 3–6; detail, Pl. 5, 2. The body is decorated triptych-wise: in the middle, Herakles and Triton; to left, and to right, a man courting a boy. Below, swans; below that, animals (lioness between swans; swan between goat and lioness). On the shoulder, fight: two pairs of combatants. Mock inscriptions on the shoulder.

3. Naples 2507, from Etruria. Tiny phot., Sommer 11073, iii, 5. Battle: chariot, one horse fallen; a warrior attacking another, who has fallen on one knee and begs for mercy. On the shoulder, chariot. The back-handle modern.

4. Florence 3789. Small phot. Alinari 17073, *b*. Frontal chariot. Below, animals (lioness between goat and swan, lioness between man and swan). On the shoulder, fight: two pairs of combatants.

XI. The Swinger.

This is a large and comical group. 'Swinger' is short for 'the Swing painter,' that is, the painter of the Boston amphora, with a woman in a swing, 98. 918. Those who tire of the symmetry, sobriety, and normality of group E will like the looser composition of the Swinger, his haphazard anatomy, quaint touches, and unusual subjects. His people all look like geese:

οἶσθ' ᾧ μάλιστ' ἔοικας;
εἰς εὐτέλειαν χηνὶ συγγεγραμμένῳ.

His amphorae type B are less elaborate than his amphorae type A and most of his neck-amphorae.

Amphorae type B.

1. Boston 98. 918. Pl. 6. The shape, Caskey *GGV* p. 59, no. 23. A, swing. B, winged goddess and three men: the goddess may be Nike or Iris setting out, the right-hand figure Zeus.

2. Athens 15111. A, a man and a youth, each with a club, setting out; between two men. B, combat.

3. London B 169, from Vulci. Gerhard *AV* pl. 100; *CVA* pl. 31, 3. Details of A, pl. 7, *b* and *e* (the youth's chiton is white). A, Apollo and the Stag. B, combat.

4. Orvieto, Conte Faina, 52, from Orvieto. B, phot. Alinari 32493. A, Theseus and the Minotaur. B, procession: three men, each with a stick or wand, and a flute-player.

5. Zurich, University. Formerly Würzburg U. 247. A, Jacobsthal *Orn* pl. 6, *a*. A, Herakles and Nessos. B, combat.

6. Munich 1386 (J. 647), from Vulci. A, boar-hunt. B, combat.

7. London B 162, from Vulci. *CVA* pl. 28, 2; detail of B, pl. 7, *a* (the baldrick, and the lowest part of the chiton, white). A, Herakles and Eurystheus. B, chimaera-hunt.

8. London B 165, from Camiros. *CVA* pl. 30, 2. A, Herakles and a woman (Iole? Deianeira?). B, arming.

9. Munich 1395 (J. 588) from Vulci. Gerhard *AV* pl. 256–7, 1–2. A, Herakles and the Lion. B, in the middle a palm-tree, with two garments (large for tainiai) hanging from it; on each side of it a tripod and a man: the tripods are probably prizes, and the men the judges.

10. Munich 1387 (J. 590), from Vulci. A, warrior setting out. B, komos: men and youths dancing.

11. Erlangen (on loan from Munich, J. 1121), from Vulci. A, warriors setting out. B, warrior setting out.

12. Formerly in the Roman market (Depoletti). Gerhard *AV* pl. 263. A, warrior in chariot. B, warriors leaving home.

13. Berlin 1693, from Nola. A, Herakles and the Lion. B, arming.

14. Naples 2792. A, small phot. Sommer 11073, iii, 4. A, horseman setting out. B, warriors leaving home.

15. Berlin 1695, from Vulci. A, horseman. B, youths and men.

16. London B 182. *CVA* pl. 33, 1. A, ball-game. B, horseman.

17. Vatican 349, from Vulci. *Mus. Greg.* ii pl. 49, 1; Albizzati pl. 44. A, Athena driving her chariot: the chariot in three-quarter-view. B, combat.

18. London B 185, from Vulci. *CVA* pl. 33, 4: detail of B, pl. 7, *d* (baldrick and staple white). A, chariot. B, warriors setting out.

19. Heidelberg. A, Herakles and Nessus. B, woman (Deianeira?) between men and youths.

20. London 1928. 1–17. 41. A, Achilles pursuing Troilos. B, combat.

21. Taranto. A, Poseidon and Giant. B, warriors leaving home.

22. Naples 2503, from Etruria. A, small phot. Sommer 11073, iii, 9. A, Herakles and the Lion. B, procession: five men and a flute-player.

23. Tarquinia RC 7205, from Tarquinii. A, boxers. B, combat.

24. Tarquinia RC 3003, from Tarquinii. A, horseman setting out. B, warrior leaving home.

25. Munich 1385 (J. 729), from Vulci. A, Herakles and the Lion. B, warriors and youths and a woman.

26. Tarquinia RC 2421, from Tarquinii. A, boxers. B, frontal horsemen.

27. Orvieto, Civico, 334, from Orvieto. Phots. Armoni. A, chariot. B, horseman.

28. Florence, fr. Combat: a warrior pursuing another, between a youth and a man.

29. Florence, fr. Combat: a warrior pursuing another, between two youths.

30. Florence, fr. Amazonomachy.

31. Civitavecchia, Marchese Benedetto Guglielmi di Vulci, 16, from Vulci. A, chariot. B, combat. Larger and more careful than usual.

32. Civitavecchia, Marchese Benedetto Guglielmi di Vulci, 1, from Vulci. A, man with horse. B, Zeus between two winged goddesses (Nikai).

33. London market. A, *Cat. Sotheby, 27 July 1933*, pl. 1, 3. A, foot-race. B, horseman leaving home.

34. London, Mr. A. Blundell. A, *ibid.* pl. 1, 1. A, two horses and a fallen horseman. B, chariot in three-quarter view. For the subject of A, cf. the Würzburg amphora 256 (Langlotz pl. 83).

35. Montpellier 129. Detail of A, from a hasty drawing, pl. 7, *c*. A, combat. B, maenad and silens.

36. Florence. Detail of B, *Boll. d'Arte* 1928 p. 176, 1. A, vintage: Dionysos seated and a maenad dancing before him; silens plucking grapes. B, silens and maenads dancing. The maenads wear short chitons.

37. Würzburg 259 (U. 258). Langlotz pl. 81, 1–2. A, Athena and Giant. B, warrior with horse.

38. New York, Mr. Albert Gallatin. A, heroes quarrelling. B, a man seated playing the lyre, and four naked men dancing: all ivy-crowned.

Amphorae type A.

39. Naples 2460, from Nola. B, small phot. Sommer 11103, iii, 2. A, Achilles and Ajax playing. B (much restored), Athena and Herakles in chariot.

40. Munich 1411 (J. 330), from Vulci. A, *AZ* 1854 pl. 67. A, heroes quarrelling. B, flute-player.

Psycter-neck-amphora.

41. Boston 00. 331 (ex Forman 289). The shape, Caskey *GGV* p. 39. A, warrior mounting chariot. B, Theseus and the Minotaur. At one handle, a man seated with a helmet in his hand, and a woman seated beside him: facing them, a woman holding a lion-cub; at the other, a man seated, and a woman seated beside him; the man gives a helmet to a young warrior: this group, and no doubt the other handle-group too, must be connected with the picture on A. Below, warriors and horsemen. On the shoulder, combat. I owe photographs to the kindness of Dr. Caskey.

Neck-amphorae.

42. New York GR 549. A, small, McClees *Daily Life*, p. 49. A, Poseidon and Giant. B, Paris and the goddesses. Photographs were kindly sent me by Miss Richter.

43. Louvre F 226, from Vulci. Pottier pl. 80; *CVA* pl. 42, 1–4. A, Poseidon and Giant. B, woman with two children, between two columns each with an owl on it: Leto according to Pottier, but the children seem both male: Aphrodite is possible, see *JHS* 49, p. 262.

44. Orvieto, Civico, 456, from Orvieto. A, Poseidon and Giant. B, Herakles with Athena and (?) Hermes.

45. London B 253, from Vulci. *CVA* pl. 62, 3; drawings in the German Institute at Rome, M 38. A, Dionysos and Giant. B, a man with a cock, and a boy. Some restoration, especially on B. For A, cf. no. 50, for B, the vase by the painter of Louvre F 51, p. 11, no. 1.

46. Munich 1494 (J. 576), from Vulci. A, Nekyia (Ajax, Persephone, Sisyphus). B, warriors leaving home.

47. Louvre F 60, from Vulci. Pottier pl. 68; *CVA* pl. 31, 7–9 and 4. A, Herakles and a woman (Alcestis according to Pottier) and Hermes. B, swing. Restorations.

48. Brussels R 318. *CVA* pl. 7, 3. Each, combat.

49. Munich 1489 (J. 1333), from Vulci. A, Athena and Giant. B, warriors leaving home. Dr. Diepolder kindly supplemented my notes on this vase.

50. Boulogne. Pl. 8. A, Herakles and Amazon. B, maenad and silens dancing. Herakles and an Amazon—or so it should be: but actually the 'Herakles' is a replica of the Dionysos on the London vase our no. 45, and wears an ivy-wreath like him. The artist must have set out to paint a 'Dionysos and Giant'; but having done his Dionysos, forgot that he was not engaged on the commoner subject 'Herakles and Amazon' and proceeded as if he were.

51. Boulogne 59. A, Herakles setting out, and Athena. B, frontal horseman between two youths.

52. Louvre F 227, from Etruria. *CVA* pl. 42, 5–7. A, Dionysos seated with silens; B, silens bringing wine and water. The foot of the vase is alien.

53. Tarquinia RC 3238, from Tarquinii. A, Dionysos with silens and a maenad under a vine. B, a warrior and his squire.

54. Louvre F 218 bis, from Etruria. *CVA* pl. 41, 2 and 4. A, Perseus and Gorgon. B, frontal chariot.

55. Orvieto, Conte Faina, 175, from Orvieto. A (fragmentary: on the left, two males and a seated male). B, two warriors between two men. Mouth, neck, and handles are missing.

56. Munich 1559 (J. 307), from Vulci. A, Herakles and the Lion. B, discus-thrower.

57. Reggio, from Locri. A, *NSc* 1917, p. 107. A, athlete and youth and men. B, Woman between men.

58. Madrid 10917 (L. 74). Ossorio pl. 6; *CVA* pl. 17, 2, and pl. 19, 1. A, Herakles and Kerkopes. B, Dionysos.

59. Brussels A 130. Gerhard *AV* pl. 43; better, *El. cér.* 3 pl. 65–6; *CVA* pl. 7, 1. A, Triptolemos. B, negro and Amazons (attendants of Memnon and Penthesilea).

60. Göttingen 14. Gerhard *AV* pl. 44; *El. cér.* 3, pl. 67; Jacobsthal *Gott. V.* pl. 5, 16; side, Jacobsthal *Orn.* pl. 25, *c.* A, Triptolemos. B, warrior and man.

61. Tarquinia RC 2448, from Tarquinii. A, combat. B, Hermes with two goddesses (one of them Athena?).

62. Tarquinia RC 3022, from Tarquinii. A, Dionysos with dancing silens. B, Athena and Giant.

63. Cabinet des Médailles 223. De Ridder pl. 6 and pp. 133 and 135; *CVA* pl. 38, 4–5, and pl. 39, 1–3 and 5. A, Herakles and, B, Geryon.

64. Leningrad 206, from Italy. Jahn *Ber. Sächs. Ges.* 1867, pl. 1, 4; A, Schreiber *Atlas* pl. 67, 3; A, new, Cloché *Classes* pl. 9, 2 ('cratère'); drawings in the Berlin apparatus, xv, 1, and in the German Institute at Rome, xi 38 and 40. A, women pounding corn. B, Hermes carrying a ram, and a woman (Maia?).

65. Florence, fragments. A, Achilles brought to Chiron. B, combat.

Amphora of Panathenaic shape.

66. Northwick, Capt. E. G. Spencer-Churchill. A, Gerhard *ECV* pl. A, 18. A, Athena and Hermes. B, foot-race.

Close to him is the vase of the same shape London B 144, from Vulci (Gerhard *AV* pl. 247; *CV* pl. 6, 2; B, Norman Gardiner, *Athletics* fig. 207).

Hydriai.

67. Oxford 1930. 646, fr., from Greece. Most of the main picture is preserved. Two men in a chariot.

68. Florence, fragmentary. Warrior in chariot. On the shoulder, remains of two male figures.

69. Würzburg 305, from Vulci. Langlotz pl. 96. Chariot. Shoulder-picture, Herakles and the Lion.

70. Louvre F 47, from Etruria. *CVA* pl. 66, 3 and 5. Goddess in chariot. Shoulder-picture, Herakles and the Lion. Cf. the last.

Fragment.

71. Florence. (Head of a youth to r., bent.)

XII. The Princeton Painter.

The style is related to the Swinger's, but is finer and more archaic.

Neck-amphorae.

1. London B 212. Inghirami *VF* pl. 299; *El. cér.* ii pl. 36, D; *CVA* pl. 50, 1, and pl. 51; side-view, Jacobsthal *Orn* pl. 24, *c*. A, chariot. B, Apollo. On the shoulder, A, battle; B, Herakles and Kyknos. The women beside Apollo may be either Artemis and Leto, or Muses. The right-hand figure is shown by his trident to be Poseidon. The winged god on the left has been called a wind-god; he holds a short rod, the head of which disappears behind his wing, but I take the rod to be a caduceus, and the god Hermes.

2. Louvre F 217, from Etruria. Pottier pl. 79 (misnumbered F 199); *CVA* pl. 40, 1 and 3, and pl. 41, 1; two horsemen from A, Swindler, *Ancient Painting*, fig. 269. A, three frontal riders and two hoplites. B, four hoplites and two frontal riders. On the shoulder, between eyes, each, wrestlers.

3. Boulogne. A, pl. 9, 1. Each, Athena between two frontal riders.

Ovoid neck-amphora.

4. Princeton. A, wedded pair in chariot. B, combat. I knew the vase from a photograph kindly sent me by Prof. H. R. W. Smith (Pl. 9, 2); other photographs I owe to Dr. F. J. Mather.

Amphora type B.

5. Rhodes, from Ialysos. *Annuario* 6–7 pp. 275 and 274. A, man and youth in chariot. B, combat.

The following are related to the foregoing:—

Amphorae type B.

1. Villa Giulia 910, from Falerii. *CVA* pl. 2, 1 and 3; A, phot. Alinari 41186. Each, chariot. The foot lost.

2. Cambridge 59. Gerhard *AV* pl. 208; *CVA* pl. 14, 1. A, chariot. B, battle.

3. Madrid 10925 (L. 52). *CVA* pl. 2, 1. A, Theseus and the Minotaur. B, Gigantomachy.

4. Formerly in the Peek collection. A, *Cat. Sotheby, 19 Dec. 1917*, pl. 4, 1. A, Athena and (Herakles?) in chariot. B, warriors leading women away.

5. Naples Stg. 144. A, Herakles and Nessos. B, combat.

6. Formerly in the Roman market (Basseggio). A, Gerhard *AV* pl. 121, 1. A, Herakles and Kyknos. B, warrior in chariot.

7. Bonn. Gerhard *AV* pl. 213. A, death of Priam. B, battle.

XIII. The Witt Painter.

Two quaint, old-fashioned vases.

Amphorae type B.

1. Louvre F 31, from Etruria. *CVA* pl. 11, 6 and 9, and pl. 17, 2; B, Pottier pl. 66. A, Judgment of Paris. B, Herakles and Kyknos.

2. London W 38. From the Witt collection. *CVA* pl. 35, 4. A, Herakles with Athena and Hermes. B, Dionysos and dancing silens.

XIV. Lydos.

In *JHS* 51 pp. 283–4, I assigned five fine vases to a single artist and called him, after one of them, 'the painter of London B 148.' Miss Richter has now found his name: Lydos (*Bull. Metr. M.* 1932, p. 78; *Metr. Mus. Studies* 4 1933 pp. 169–178). She saw that a new vase, a grand column-krater in New York (*Bull. Metr. Mus.* 1932 pp. 75 and 77; *AJA* 1932 p. 96 and p. 97 fig. 5; *Metr. Mus. St.* 4, pl. 1 and pp. 171–3), was on the one hand by the same painter as those five vases, on the other by the same painter as the dinos with the signature of Lydos in the Acropolis collection at Athens (607: Graef pll. 33–5). To these seven she adds the oinochoe with the signature of the potter Kolchos in Berlin, which I had already connected with the painter of London B 148 (*JHS* 51, p. 284); and fragments of a column-krater or the like in Athens (Acropolis 631: Graef pl. 39). Acropolis 631 is at least very close to Lydos, and so is the plate Acropolis 2410 (Graef pll. 97–8). Miss Richter is no doubt right in rejecting the fragments Acropolis 923, which I had connected with the Kolchos jug.

Pl. 10 gives one side of his amphora in the Cabinet des Médailles (206: De Ridder, p. 116 and pl. 5; *CVA* pl. 34, 1, 2, and 8).

XV. The Amasis Painter.

I have treated him at length in *ABS* pp. 17, 21–2, and 31–6, *BSR* 11 pp. 3–4, and *JHS* 51 pp. 256–275. Add to my lists the two vases since assigned to him by Mrs. Karouzos (*AM* 56, pp. 98–111):—a lekythos in Athens (ibid. pl. 2: cf. *BSR* 11, p. 10 note 9) and a splendid amphora-fragment from Samos (*ibid.* pl. 3). Add also fragments of a fine early amphora in Bonn, 504, which I figure by the kindness of Prof. Delbrück

(Pl. 11, 1). Compare the frontal chariot with those on other works by the same hand: an oinochoe in London (B 524: *ABS* pl. 11, 1), a fragment in Palermo (*Mon. Ant.* 32, pl. 91, 1: see *JHS* 51 p. 266, LL): note especially the remarkable drawing of the horses' breasts. The long lank manes are unusual at this period, and are a survival from the seventh century (cf. Langlotz *Bildhauerschulen*, p. 176 note 14).

As to the little stand, of 'Sosian form,' in the Acropolis collection (Graef and Langlotz pl. 100, 2481), which in my *Amasea* (*JHS* 51 p. 269) I associated with the works of the Amasis painter, but did not know well enough to be sure that it was from his hand, I can now be more precise: it is certainly his. In the same study (pp. 263–4), I assigned two fragments of oinochoai to him; there are four, not two, in the collection:—

Acr. 2239 (Graef and Langlotz pl. 95).
Acr. 2240. This may belong, as Langlotz says, to the same vase as 2239.
Acr. (number?). Number GG in my list *JHS* 51 p. 263. Not from the same as 2239 and 2240.
Acr. 2238. From a third (or fourth) oinochoe of the same shape.

There are fragments of two other vases by him in the Acropolis collection. Acr. 1241 consists of two sherds belonging to an unusual bowl-like vessel of delicate make: one sherd gives head and shoulders of Herakles, the other the upper part of an onlooker, a youth, clothed, and holding a spear in his hand. Acr. 2510 (Graef pl. 104) is from a capital plaque with a figure of Athena.

XVI. The Affecter.

See *ABS* pp. 37–8; *JHS* 49, p. 264; *CVA* Oxford pl. 3, 20–22, and pl. 11. The Torr neck-amphora is now published in *Cat. Sotheby*, 2 July, 1929, pl. 2, 2, and the Würzburg vases in Langlotz's new catalogue. A neck-amphora in Erlangen has been added by Lippold (*BPhW* 1930 p. 943), another in Toronto by Robinson (*G.V. Toronto*, pl. 33, no. 298, and p. 112). Another, with arming, is in the collection of Marchese Benedetto Guglielmi at Civitavecchia, no. 13; fragments of several in Florence.

XVII. Elbows Out (the Painter of Louvre E 705).

As my references to this curious mannerist, companion of the Affecter, are somewhat scattered (*BSR* 11, pp. 4–5; *ABS* p. 23; *JHS* 49 p. 270; *JHS* 52, p. 142; *ibid.* p. 202), I give a list of his works, including some additions.

Neck-amphorae of a special shape.

1. Castle Ashby. *Burl. Cat.* 1903, pl. 89, G 9; *BSR* 11, pl. 1, 2, pl. 3, 1, and pl. 4, 1–2; detail, *ABS* pl. 11, 2. Komos: below, Herakles and the Lion: below, animals.

2. Bonn 505, three fragments: the largest is reproduced, by kind permission of Prof. Delbrück, in pl. 11, 2. Above, a silen and a maenad, then a male (Dionysos?), a naked male with a cloak, and a little boy. Below, on the right, a hero in action—compare the Castle Ashby Herakles—then onlookers.

3. Louvre E 705, from Etruria. A, *BCH* 1893 p. 432. A, boxers. B, silens. Below, cocks and hens. Below that, animals. The foot is false. Much restored.

Hydria of special shape.

4. Boston 95. 62. *FR* iii, p. 222 fig. 106; Hambidge *Dynamic Symmetry*, p. 57; the shape, Caskey *GGV* p. 103. Return of Hephaistos. On the shoulder, love-making.

Lekythoi.

4*a*. Athens, Mr. M. P. Vlasto. Nike between youths. On the shoulder, swan between cocks. This, and the next, assigned by the owner.

4*b*. Athens, Mr. M. P. Vlasto. Komos. On the shoulder, two lionesses.

5. Athens 493. Collignon and Couve pl. 30, 693. Sacrifice. Unusually rough, but I think his own.

Oinochoe (olpe).

6. Cabinet des Médailles 180, from Camiros. De Ridder pl. 4 and p. 88; *CVA* pl. 45, 6–7, and pl. 46, 2. Youths and men.

Small stand.

7. Samos, fr., from Samos. *AM* 54, Beil. 19, 5. Komos. Miss Haspels tells me that the fr. is from a small stand.

Small bowl-like vessel.

8. Villa Giulia, frr. Love-making. On the offset rim, ivy. Very delicate make and minute drawing.

Covered cup or the like.

9. Oxford, four frr., from Naucratis. Love-making.

Band-cups.

10. Civitavecchia, Marchese Benedetto Guglielmi di Vulci, 58, from Vulci. Love-making.

11. Cassel? from Samos. Boehlau *Aus jon. Nekr.* pl. 10, 11. Komos.

12. London B 601. 34, fr., from Naucratis. *JHS* 49, pl. 15, 21. Komos.

13. Naples 2496. Battle.

14. Berlin (no number?). Warriors. Inscrr., A, χαιρε καιπι, B, χαιρε καιπ.

15. Naples 2500. Stag-hunt.

Appendix.

I append a brief account of such *signed* vases of this period as have not appeared above. For potters and painters whose names occur on cups, either solely or as well as on other kinds of vase, see my *Little-Master Cups* in *JHS* 52 pp. 167–204.

Painters.

'*Mnesikleides.*' See *BSA* 29 p. 200. The inscription on the foot (wrong in Collignon and Hoppin) is εγραφσεν ⁝ Μνεσ[ικλε]ιδες : εδοκεν : Φοκι ⁝ Κεαλτες ⁝ Is M. the painter and K. the giver, or the other way round? The interpoints (three after εγρ. and Φ, two after Μν. and εδ.) would suggest that K. was the painter, the zigzag that M. 'Apparently wider circle of Amasis' (Pfuhl, p. 262). I note a certain resemblance to the cups of my Heidelberg group (*JHS* 51 pp. 275–282), which is closely connected with the Amasis painter.

Nearchos. See *JHS* 52, p. 201 and p. 176, and Richter in *AJA* 1932 pp. 272–5. A word or two on the inscrr. of the New York vase:—Δόφιος : δέφομαι : : Στρόφιος : στρέφομαι. For Τερπεκηλος Miss Richter's first suggestion seems the better. ηευσετι I take to be meaningless. For Ψώλας read Ψωλᾶς. Χαιρει should be third person, Miss Richter's first thought: cf. (if authority is needed) Ar. *Peace* 291.

Oikopheles. The decoration of the Oxford vase is published in Gardner *Ashm. Vases*, pl. 26, 189, whence Hoppin p. 299, but the shape has not hitherto been figured or described: it is not a cup, as Gardner calls it, but a small-stemmed handleless dish, suitable for holding, say, olives, comfits, or the like. The date is the third quarter of the sixth century. Payne has asked (*NC* p. 322) if Oikopheles be not, with Chares, the worst vase-painter whose name is known from antiquity. I think Chares comes first, then Oikopheles: it should be remembered that others, who occur to one as strong candidates, such as Gamedes, Nikias, Nikosthenes, are known to us as potters, not as painters. I hold no brief for Oikopheles, but must defend him from one charge: Gardner's unpleasant suggestion

(*Ashm. V.* p. 6), that Oikopheles meant his inscription for a hexameter, is baseless, and I am surprised to find it countenanced by Pfuhl (p. 253).

'*Euphiletos*.' Frr. of a plaque, in Eleusis ('Εφημ 1888, pl. 12, 2, whence Hoppin p. 89, and, through inadvertence, p. 143, left), bearing the inscription Ευφιλετο[ς . . . . .]ν, were compared with the Affected vases by Reisch (in Helbig's *Führer* [1] 2 p. 237), Gsell (*F. de Vulci*, p. 505), and Karo (*JHS* 19 p. 158), and Pottier affirmed (*Cat.* p. 723) that the style was the same. Zahn rightly denied this (*BPhW* 1902, p. 1265: cf. *ABS* p. 37). Euphiletos also occurs as a love-name (see *JHS* 47 p. 87), and Robert suggested (*RE* s.v.) that the fair Euphiletos may have been the painter in his youth, but as the vases with *Euphiletos kalos* are considerably later in style than the plaque this is unlikely. Lastly, we don't know that Euphiletos was a painter at all: the inscription reads Ευφιλετο[ς . . . . .]ν; the second word need not have been εγραφσεν, may equally well have been εποιεσεν or ανεθεκεν.

Potters.

Kriton. See *Vases in Poland* pp. 4–5. The signed vase is now properly published by Bulas (*CVA* pl. 16, 2).

Lysias. See *Vases in Poland* p. 5. The word after εποίησεν is evidently ἡμίχουν (Nachod in *RE* s.v. Lysias). The letters ει will either be a truncated ειμι (as Nachod), or possibly an εἶ, addressed to the pot.

Nikosthenes. A good many of the vases with this signature belong to our period, but I reserve Nikosthenes for a special article: see meanwhile *ABS* pp. 23–4, *BSR* 11 p. 6, *Campana Fragments*, p. 33, and on the cups *JHS* 52, p. 201. Not all the Nikosthenes vases are worthless: the krater and the neck-amphora in London, the Louvre cups F 123 and F 124, the Louvre cup-fragment with Artemis, the Florence pyxis, and especially the phialai in London, Paris, and Würzburg, have merit.

Theozōtos. *WV* 1888 pl. 1, 9–10, whence Hoppin p. 353. See also Pfuhl pp. 252–3. Hoppin misdates; and gives the inscr. wrong. The date should be about the middle of the sixth century or not long before. The signature is Θεοζοτος (a trace of the sigma remains) μεποεσε. I did not see the nu ephelkustikon read by Pottier (*Album* p. 98), and stressed by Pfuhl (p. 252).

Timagoras. The two Louvre hydrai are now republished in *CVA* pl. 63–4. Pfuhl (p. 272–3) is down on Timagoras; but the chariot hydria, which is in perfect preservation, is an excellent vase; and the other is pretty good also. The two hydriai seem to be by a single painter. I don't know any other vases by him: the Madrid hydria ascribed to him by Pfuhl (now republished in *CVA* pl. 8, 1 and pl. 9) is by the Affecter, as I noted in *ABS* p. 37.

J. D. Beazley.

ARCHAIC ARGIVE TERRACOTTA FIGURINES TO 525 B.C.

(Plates 12–16)

There are in existence three more or less representative collections of Argive terracottas. The most complete and important is that from the Argive Heraeum [1]; a good supplementary collection comes from the Heraeum at Tiryns [2]; thirdly, some hundred, mostly fragmentary, but, where the heads are undamaged, highly important Argive figurines have been discovered at the Heraeum of Perachora in the northern Corinthia.[3] A fourth group—from Hagios Sostis or Tegea [4]—is patently within the Argive sphere of influence, but, as we shall see, succumbs very early to Corinthian influence also, and must be regarded as hybrid. Other small groups [5] have been found at a number of sites in or near the Argolid, of which the most considerable was discovered at Argos itself.

It is obviously of importance for the history of archaic art in the Argolid to establish the development and, as far as may be, the absolute chronology of the Argive series of figurines; of the greater, inasmuch as we have in the Archaic period but two examples of major sculpture which are assigned with certainty to the Argive School, the statues of Cleobis and Biton from Delphi. Otherwise, apart from a rough headless seated female statue,[6] and two bronze statuettes,[7] all from the Argive Heraeum, we are left in the dark as to the course taken by Argive plastic art in the seventh and first three quarters of the sixth centuries.

The grouping by Walston of the Argive Heraeum terracottas has from the first been recognised as too arbitrary to be of any practical value [8]; while the otherwise excellent article by Frickenhaus, dealing with the finds

[1] Walston, *Argive Heraeum* II *init.* [2] Frickenhaus, *Tiryns* I, 51 ff.

[3] These are not yet published, and it is owing to the kindness of the Director and Committee of the School that I am here able to publish photographs of some heads from Perachora and to refer to others.

[4] Good collections in London and Athens (Nat. Mus. Nos. 4324–4364) and the museum at Tegea. See *Tiryns* I, p. 55.

[5] See the catalogue *Tiryns* I, p. 52: as we shall see, there are also one or two from Boeotia. Cf. also *Arg. Her.* II p. 10. We must also include the large collection of figurines, part Argive part Corinthian, recently discovered by Mr. Bertos at Klenies (ancient Tenea): these are not published and only a handful is shown in the Nauplia Museum. See below p. 27 note 1.

[6] Ἐφημ. 1920 p. 50.

[7] *Arg. Her.* II, pls. LXX–I. For objects attributed to Argos in the past cf. Déonna *Dédale* II 117, notes 1–2.

[8] Sharply criticised by Furtwängler, *B.Ph.W.* 1906 p. 790.

from Tiryns, is vitiated in its chronology by the fact that the author fails to recognise that the Tirynthian sanctuary was provincial,[1] and so need not be taken as the measure of the Argive class as a whole; thus, the late date of moulded heads from that site (most after 550) gives no indication of the dating of earlier moulded heads from the central shrine of the Heraeum, where, as we shall see, well-modelled heads in the true tradition of archaic Argive style were being produced at least 60 years earlier.

The bulk of archaic Argive figurines, as is well known, are handmade, with primitive bird-faces and so-called *pastillé* eyes; there is every reason to believe that this type of face remains without further development common to this class of terracotta over a period of at least a century and a half. It is therefore clear that no stylistic or chronological conclusions can be based on these.[2] Stratigraphical evidence is also non-existent in all the three sites above mentioned.[3] Fortunately, stylistic evidence from early archaic moulded or carefully modelled heads is, if not abundant, quite adequate to determine the course of the series which we wish to find: and a judicious use of the evidence provided by the contemporary development of Corinthian terracottas will be found helpful in the question of chronology. To this comparatively small number of figurines, with heads showing recognisable style, we propose to confine ourselves almost exclusively in this article.

A word as to the lettering and numbering of the heads. Class A contains four single heads all of different periods; all are anterior to Class B, but do not constitute a class in the same sense as the others; Class B and the following classes are definite groups of contemporary or stylistically related heads, each group illustrating a different stage of development. Unfortunately the Class A heads are so few that we have but one specimen of each stage in this early period: it is fortunate, however, that our four surviving heads represent each a different stage, and give some indication of the course taken by the Argive style from the subgeometric period onwards to the point at which the sequence of groups begins.

We start with the small subgeometric head from the Argive Heraeum [4] (Fig. 1, 1–1*a*). In style it is still almost entirely in the geometric tradition; the low, almost non-existent, forehead, straight-cut fringe, prominent nose and chin, small slit mouth close under the nose, and enormous eyes, are all

[1] Such provincialism as this was acutely suggested at Rhitsona by Burrows and Ure (*B.S.A.* XIV p. 312): the lack of better-modelled figurines at Tiryns until *c.* 550 must be explained on similar lines. Frickenhaus' remark p. 116 § 4 is a definite misstatement: there is nothing at Tiryns to correspond with our classes A–E.

[2] Some technical criteria are suggested lower down (p. 32 notes 0, 1) as perhaps capable of affording evidence for the chronology of the very large handmade class.

[3] Except that Walston was able to decide that all figurines were later than the construction of the earlier temple (v. inf. p. 36).

[4] *Arg. Her.* II, p. 148 and pl. LXVI 9 *a–b*.

typical; even more so is the conception which envisages only two profile views of the head, on each side of a knife-edge central line.[1] In this latter respect it is more primitive than the subgeometric head from Sparta,[2] the finest of the few surviving heads of this period. But certain technical details such as the use of a buff slip and, more significant, the presence of incision, render it certain that the head is not quite so old as the style would indicate. We may compare the head *A.A.* 1892 p. 162

Fig. 1.—Argive Heraeum. 1, 2 =A 1, A 2.

fig. 25, as Walston does, *op. cit.* 148 note 1; also the head *R.A.* 1900[2] pl. xiv, 1.

Between this subgeometric specimen and the earliest of the later uninterrupted sequence which we shall trace in a moment, three Argive figurines with heads preserved are known to me. The first, A 2, Fig. 1, 2–2*a*, is the head of a roughly-made female figurine, also from the Heraeum; the geometric style is still apparent in the nose placed high in the middle

[1] Cf. Kunze *A.M.* 1930 p. 144 *sq.*

[2] *B.S.A.* XXIX pl. I. The head recalls certain Cretan geometric, rather than mainland figurines.

[3] Cf. V. Muller, *Frühgriechische Plastik*, fig. 280.

of the forehead and the high and small mouth [1]; but the head stands also at the beginning of the period which formed the style of Class C below, as may be seen from the square projecting chin, flat heavy face, and large thick neck. The second example, A 3, to be dated perhaps four or five decades later, is a peculiarly interesting head from Aegina of fine workmanship, belonging to a figurine of the type with hands holding the breasts [2]; anything in the nature of a detailed description of it would be out of place here, as it is about to be published with other finds from the Aphrodite temple by Dr. Welter [3]; suffice it to say that the object is definitely of Argive fabric, and that it shews a very clearly defined advance upon the previous specimen, though the geometric element is not yet eliminated.

The third head, A 4 (Pl. 12, 1, 1*a*, 1*b*), is now in the Argos Museum.[4] It belongs to a type of semi-cylindrical figurine better represented by the following Class B, and described with reference to that: it seems to be the earliest example of this type in the Argive series. The face pursues the course of refinement from A 2 towards the more regular dedalic form of Class B; from the former it has made a considerable advance in that it is liberated entirely from geometric tradition [5]; but the artist still lacks the sureness of touch which distinguishes the consummate products of Class B and the Delphi statues, as may be seen in the clumsily over-emphasised triangularity of outline of the face. Apart from these more important considerations, the general correspondence of type with that of Class B, and the fact that the neck is slightly broader even than in the latter, would suggest that A 3 is about a decade previous to the Class B figurines. Hair, eyeballs, and brows are painted with black varnish, as in the following group, directly on the clay; there is no slip. The hair is of interest as a parallel in some respects to the Cleobis and Biton system (cf. Pl. 12, 1*a*, 5*a*), with its three *Perlenlocken* passing behind each ear and falling to the shoulders, and its roughly indicated curl-fringe: the back hair is differently treated, however (pl. 12, 1*b*).

[1] The face is in fact the heir of a geometric (or Late Mycenaean, cf. *Annuario* X–XII pp. 612–623) tradition of flat-faced figurines with low-set eyes, which has numerous representatives in Crete; but in our example the squareness of face is significant.

[2] The Hellenised and clothed version of the Oriental naked goddess with both hands to her breasts (so common in Cyprus) is not very frequent. The bulk of the examples comes —as we might expect—from Rhodes: it is worth while here to point out that the three examples from Aegina (Ἐφημ. 1895 pl. 12) are certainly of Rhodian style and fabric, dating from the first half of the seventh century.

[3] Dr. Welter kindly allows me to make mention of this head in this article.

[4] Mrs. Karouzou, Ephor of the Argolid, has kindly given me permission to publish this figurine.

[5] The nose is no longer set in the forehead, and in general the features have a more natural relation with the surface of the face, quite alien from the general upward thrust of features so characteristic of the geometric style.

Class B (pl. 12, 2, 3, 4) consists of a group of very finely moulded little heads [1] belonging to standing figurines with cylindrical body, above which the bust slightly expands over a very high waist; the arms are short pointed stumps, curving forward; the neck is too broad, particularly at the base, where it is as wide as the shoulders. The heads are of the Argive dedalic style, having a triangular face, curved chin, low forehead, with hair almost straight across, save for a small indentation indicating the central parting (this style of hairdressing continues in vogue for female figurines until the end of Class E (cf. pl. 14, 5), despite the gradual break-up of the low forehead under foreign influence in the period of the partly contemporary Class F). Eyes and eyebrows are clearly defined,[2] the nose is short and broad, leaving a tall upper lip. Despite the general care and excellence of the workmanship, the conception of the face as an object in three dimensions is still rudimentary [3]; it is a more or less flat surface set perpendicularly into its broad columnar neck, from which it shews an inadequate projection forward. Two facts must be added; that these heads are all painted, mostly in black varnish, directly on the surface of the clay: hair, eyes, eyebrows, and body below neck (clothes) being thus treated; second, on one specimen, and almost certainly originally on all, locks of hair and round earrings were added by hand after the head was withdrawn from the mould; this eminently Argive characteristic appears now for the first time, at any rate in the better modelled figurines, though its importance as a criterion of provenance does not emerge till later on.[4]

A comparison of this type with the heads of the Cleobis and Biton statues at once suggests itself (Pl. 12, 2, 3, 4, 5, and 2*a* with 5*a*). It is an excellent instance of the propriety with which one may compare small things with great, for our small heads lose none of their salient characteristics by reason of their size [5]; plate 12, 3, 5, shews the two together in approximately the same size. The similarity is remarkable; we have in both the same low forehead, eyes and brows, short broad nose, long upper lip, straight mouth, and a short triangular face. The treatment of the fringe is somewhat different, but there are some slightly later (Class C) Argive

[1] Five from the Argive Heraeum and two from Perachora. The Argive Heraeum specimens and one of the two from Perachora all belong to the same cylindrical type of figurine: the other from Perachora has a flatter body, and its head has an applied fringe like that of A 2 and the earliest specimen of Class E (pl. 12, 4). A much larger head of this class comes from Klenies: it is badly weathered, but of unquestionably Argive manufacture, and the similarity to Cleobis is unmistakeable.

[2] This is in general true of early Argive figurines, in contrast, for example, to those of Sparta, where painted decoration only was applied, until the end of the seventh century.

[3] This shallowness of depth from front to back has been noted by Payne (*Necrocorinthia* p. 241) as a characteristic of Corinthian dedalic terracottas: it is significant that in the Argive terracottas it should be most accentuated in the class which shews the dedalic style most nearly.

[4] See below p. 34.

[5] Cf. *Necrocorinthia* p. 232.

terracotta heads which shew the same curl-fringe faintly curving above the forehead; the earlier head from the museum at Argos of course shews the same type of treatment. The neck of the stone statue is thick, without, however, the grossly exaggerated thickness of the terracottas; but this is due to the technical consideration that in stone neck and head can be carved in one piece, in clay the head must be stuck into the neck. Apart from details, one is, I think, instantly convinced of their relationship by the striking as it were family likeness, and by the charming air in both of combined freshness, confidence and curiosity which is apparently produced by Argive art in just that stage of development.[1]

These heads are our only specimens of Argive dedalic style, but at Argos the true dedalic style does not appear to have passed through the long development which is observable in the series of protocorinthian or early Rhodian terracottas[2]; to see this, one has only to compare the heads A 3, A 4 with their Corinthian contemporaries. Even the Class B and Cleobis heads, though possessing many of the characteristics belonging to the dedalic type, have a shorter face, a fringe less low and straight, and a greater depth from front to back (cf. pl. 12, 2*a*, 5*a*) than is usual in pure dedalic terracotta figurines. Class B must be, if not exactly contemporary with Cleobis, at least extremely close: if it were certain that stone sculpture is always in advance of terracotta modelling, the excellence of the modelling of Class B heads might suggest a slightly later date than that of Cleobis: but in any case it could scarcely be more than a decade.

Of Class C we may cite six examples, not all contemporary, as the specimens of the last class, but all clearly illustrative of the same phase of development (pl. 13).

Probably the earliest example is the head (*B.C.H.* 1907, 156) discovered at Argos (pl. 13, 1); the fine head from Perachora (pl. 13, 3) is perhaps the most typical of the group. The development from Class B is obvious: the angularity has softened, a squarer outline is developed; the face has the same characteristics, but significant changes are the greater height of the eyebrows[3] and the shortening of the upper lip to a more natural relation

[1] Déonna (*Dédale* II, p. 118) applies the adjective 'brutaux' to the faces of Cleobis and Biton; whether this signifies 'brutal' or 'brutish' to the Latin mind, it is difficult to see how it is applicable to the heads in question.

[2] For early or proto-dedalic at Rhodes cf. B.M. B 159 (with which compare the Aegina plaque mentioned above, p. 4 note 2: both are very early seventh century), and for developed dedalic B.M. B 153 etc. The Corinthian dedalic figurines from Perachora await publication. If the Argive terracottas had passed through any such development as this, it is almost certain that some earlier dedalic figurines would have been found at the Heraeum: we must not forget the dedalic relief plaque (*Arg. Her.* II, pl. xlix, 1), but in view of the Corinthian duplicate from Perachora (*J.H.S.* 52, p. 242) we cannot be certain that the mould was of Argive manufacture.

[3] We may note here that the strongly marked, highly arched eyebrows of this class seem to be the principal reason why Langlotz claims the late Class C head from the Argive

with the nose, which gives the face a more unified and working appearance. When we look at it in profile, we see that the artist still misunderstands the relation of head to neck, for the face is still stuck on to its column in the old mechanical way of Class B; but it does achieve a somewhat greater depth from front to back. The nose is better articulated from the still flattish surface of the face, and even the latter shews a softening of the rigid system of two planes meeting at right angles which is characteristic of most of the terracottas noticed up to this point. In this Class C we observe, more perhaps than in any, a peculiarity very much pronounced in the Argive style down to the beginning of the late Archaic period, that is, the abnormal projection of the chin [1]; if one draws a perpendicular upward from the point of the chin, the line will always pass considerably in front of the forehead. Whether originally the head was consciously set on at this angle to give a more realistic impression of three-dimensionality to faces inevitably too narrow from front to back, it is hard to say. It may be added that we shall find the prominent and vigorous, even if not always unduly projecting, chin an essentially Argive trait right through the series, and in this the Argive style contrasts with a class of middle sixth-century Corinthian terracottas, which, as we shall notice, are distinguished by a receding or even vanishing chin beneath a somewhat spherical face. A small detail which is mentioned here because it appears to be confined to this class, is an grooved U-shaped line passing through the roots of the nose, the corners of the mouth, and curving just above the point of the chin; unfortunately this is not clearly seen in photographs but is very obvious when looking at the objects themselves. The examples of Class C are the Vollgraff head which shews all the characteristics just mentioned, together with paint on eyes and eyebrows,[2] and flat applied locks (the hair from the Perachora head is broken off) decorated with crosscut incisions (pl. 13, 1); in these details and in general style it resembles the smaller head from the Argive Heraeum (pl. 13, 2 and *Arg. Her.* II, pl. XLVII, 4). To these three specimens we may add the very large mask from Selinus [3] (pl. 13, 4), which, if locally

Heraeum (to be noticed presently) as Sicyonian: he thinks this detail is distinctively Sicyonian, but he is certainly in error, for it occurs on heads which he attributes to other schools, *e.g.* the earlier Boston Kriophoros. Cf. *Necrocorinthia*, p. 234.

[1] This trait is not, of course, confined to Argos, but is perhaps more universally characteristic of Argive heads in the archaic period than of any others. Even the carefully worked Delphi twins, whose heads are modelled with, not stuck into, the necks, convey from the front the impression of a forward thrust chin, though the projection when seen in profile is not noticeable: cf. the plate *Fouilles de Delphes*, IV, 1.

[2] This and the following are the last figurines to have eyebrows and outline of eyes painted in black—the first being A 3. The Argive Heraeum head has a thin white slip—see p. 32 note 1 below.

[3] *Mon. Ant.* XXXII Tav. XLVII, 6 and *Dedalo* 1930 (Marconi); the only non-Argive feature of this head is the fact that it is a mask, which points to its having been made in Sicily after the importation of the earliest masks from Ionia. Masks (other than grotesques

made, is made under exclusively Argive influence of this date; a comparison with the Perachora head would seem to support this interpretation. Slightly later, at the end of Class C, come three heads, again from the Argive Heraeum, of which the largest and finest (pl. 13, 5) is classed by Langlotz as Sicyonian, for no good reason that I am able to understand [1]; the head was found at the Argive Heraeum, is made of Argive clay, and is absolutely in place in the development of Argive style; and, if it be Sicyonian, why not also its two companion heads (pl. 13, 6 shews one)? All three examples have the curl fringe we noticed in A 4 and Cleobis: but the main point of development from the true Class C type is that in them we have for the first time a systematic attempt to shew the face in one curved surface instead of in two flat planes, and also the true relation of neck and jaw [2]; these heads therefore lead on without a break to the transitional Class D.

This class contains very few specimens—Perachora provides two good ones—and the transition it represents obviously took but a very short time; it is, for example, clear that from the profile of the latest C head (pl. 13, 5) to that of the earliest E (pl. 14, 2) we have not very far to go. The main points to note are that while the outline of the head remains square, the face becomes more distinct from it, and recedes to an, at first, hesitantly conceived but in fact more truly three-dimensional shape on either side of a central line formed by a pointed nose and a pointed chin. In profile we see the now correctly rendered jaw-bone. The somewhat inept beginnings of these radical innovations, which in the example figured from Perachora (pl. 14, 1) leave by a too sudden sloping away of the cheeks a sharp central line, rapidly give place to the lovely series of Class E heads which illustrate their developed result.

Of Class E the Argive Heraeum (pl. 14, 2) has the earliest example, and Perachora three more (pl. 14, 3, 4, 5), each later than the former; a fifth example comes from Selinus.[3] The cheeks have filled out and there is a general tendency towards the elimination of all archaic features. Eyes, nose and mouth preserve their distinctively Argive shape, but they are now fully inspired by the unifying principle we saw at work in Class C: we now have faces, not an effective juxtaposition of features.[4] The Argive Heraeum head is the earliest and the Perachora head (pl. 14, 5) the latest of this group, which will thus be seen to have a considerable internal development

such as the Spartan) were apparently not manufactured in mainland Greece till the second half of the sixth century, which is certainly too late a date for Class C.

[1] Langlotz says that Argive style is known from terracottas, but he makes use of none of them. Had he studied the Heraeum series, he could hardly have made this error (*Frühgrieschische Bildhauerschulen*, p. 57).

[2] This correct rendering of the jaw is perhaps the only detail in which Argive heads excel Corinthian in the whole early archaic period.

[3] *Mon. Ant.* XXXII Tav. XLIII, 2.

[4] Cf. Casson, *Technique of Early Greek Sculpture*, p. 105.

in its duration, a point worth remembering when we deal with the absolute chronology.

With the next, Class F (pl. 15) we come to the period of mass-production which all fabrics appear to have passed through at this stage, owing to the sudden influx of mass-produced figurines from East Greece: and with it there begins the first break in the Argive tradition. It is useful at this point to summarise the types of figurines to which the heads of Classes A to E belong: it is noteworthy that all our figurines before Class C—perhaps even before Class D, for no Class C head has its body preserved—represent *standing* female figures with flat or quasi-cylindrical bodies: the typical Argive seated 'goddess' occurs quite late in our series—as late as the early sixth century, as we shall see: the case is again in contrast to Corinth, where the seated female 'supported' type is as early as the beginning of the seventh century at least: whether our rule holds good for the handmade Argive series as well—*i.e.* whether the seated handmade type starts in or after the period of Group D, and only standing handmade figurines are earlier—is a point worth considering.[1] Classes (C), D, E, then belong to the seated female 'supported' type: that is, with the skirt bent at the waist and again at the knees, and two or (in larger figurines) one heavy support below to enable the figure to sit upright. Locks of hair, straight or curling, ears, and (usually circular) earrings, were added to the already moulded head, but that is the sum of the ornamentation, the body being left plain and painted with black or brown-red varnish directly on the surface of the clay; some specimens wear a *low* round polos. Class F, on the other hand, may be called the 'Ornate' class: where figurines, beside their plastic locks and earrings, are further embellished with a tall, often fantastic polos,[2] and a multitude of chains and necklaces, and sprays of flowering shrub; they are also provided with a separate seat or throne (*i.e.* not merely supports behind). The upper part of the body is in the larger examples handmade and sometimes quite flat, and across its broad surface the decorations are hung in tiers: in other cases a more plastic rendering is aimed at; in the smaller examples the body and throne tend to be cast together in one mould, and the head in another. In general, these figurines shew a plethora of ornamentation reminiscent of Cypriot and oriental fashions.[3] Finally

[1] Furtwängler and Frickenhaus agree that the handmade series started in the eighth or seventh centuries; they give no means of deciding whether a given specimen comes early or late in the series. For suggestions as to criteria for this decision, see p. 32 notes 0, 1.

[2] The variety of polos used is great—see *Arg. Her.* II, pl. XLV. On the flowering shrub *Tiryns* I, pp. 121 ff.

[3] The pastillé style is strangely reminiscent of some (rather earlier) Hittite figurines from Karkhemish (cf. *L.A.A.A.* VI, pl. XXVI, *b* 1 and the figurines from Deve Hüyük in the Ashmolean Museum): it seems certainly oriental in origin. It is important to realise that so far as our evidence goes, this type of lavish applied ornamentation appears quite suddenly in Class F without having been used before. Of course the

they are almost without exception coated with a thick white chalky slip.[1]

The heads of Class F are notable for an almost exact uniformity with one another: Walston includes them in his 'Advanced Argive' class, and signalises over two hundred examples [2]: far the larger proportion of these heads might have come from the same mould, though of course they do not in fact do so. Perachora has some fifteen more, and Tiryns one or two of a contemporary but slightly divergent type (Nauplia Mus. Nos. 1593, 1624,

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single appliqué band across the chest ending in two pastilles (representing περόναι) had been in use at Corinth certainly, and in all probability at Argos, on handmade figurines since the end of the seventh century; but this is no parallel to the elaborate schemes of adornment here in question. It is not the purpose of this article to establish decorative peculiarities as chronological criteria for the handmade Argive figurines, but it is permissible to suggest that a methodical examination on the lines of Walston's 'Tirynthian-Argive' classification (*Arg. Her.* II, pp. 11, 12) might establish that such handmade figurines as had decoration of the ornate style, more especially such as corresponded accurately with the schemes of Group F, were at least no earlier than the latter; for the handmade class see also next note.

[1] Frickenhaus says (*Tiryns* I, p. 53) that all Argive terracottas have or had a white slip: this seems to be too comprehensive a generalisation. Class B figurines clearly had no slip, and the bodies at least of Classes D, E, and, in very rare cases, even of F, have a red or brown varnish directly on the clay. Granting, however, that Frickenhaus' statement is in the main correct, there is some reason to think that the distinction made by Burrows and Ure for Boeotian pappades (a distinction ignored by Frickenhaus in discussing their conclusions), of a thin cream, or buff slip for Class A pappades, and a thick dead white chalky slip for Class B may hold good for the Argive fabric as well. For example, the slip seen in the small Class C head from the Argive Heraeum (pl. 13, 2) resembles that of some Class A pappades, but is not at all comparable with the coating of Class B pappades or of our Class F. Again, certain (partly unpublished) evidence proves that not uncommonly earlier Argive figurines were treated only on face and neck with this thinner slip, and this is precisely the technique of some Class A pappades (cf. Nat. Mus. No. 4009) but never of Class B pappades. It would be useful as a further criterion of chronology for the handmade figurines if one could establish that such a change in technique took place about 550 in the Argolid as well as Boeotia; certainly Class F figurines, which as we shall see are to be dated about then, seem to have a much thicker white coating than their predecessors. I have suggested below that the thicker slip was borrowed from Ionia. Spartan figurines use slip of this sort in the seventh century, but even this is not of the Ionian chalky whiteness.

In regard to Argive-Boeotian correspondence in fabric, we should emphasise that such points of contact as exist came from Argos to Boeotia and not vice versa. For the former hypothesis there is good evidence, for the latter none: for example, an Argive figurine (Nat. Mus. No. 4306) of the ornate, thick-slip style comes from Tanagra: a standing figurine of absolutely Argive style but with Boeotian red and white decoration from Halae is in the Thebes museum: and the Boeotian predilection for *genre* scenes executed in terracotta, which distinguished the Tanagra fabric of fifth to fourth centuries, finds its precursor in the Argolid; cf. below (p. 35, note 1), the large group of women baking, and the single examples of bread-makers from numerous Argive sites. It is worth remarking that the thick chalky slip was in use for figurines in Boeotia about a quarter of a century before we find it in use in Boeotian vases.

[2] *Arg. Her.* II, pl. XLV, 6–13. Cf. the uniformity of facial type in large classes of the East Greek hollow-cast standing Kore: cf. *B.M. Terracottas* pl. xvii, 2, 3 (contrast 4).

etc.); there are some examples at Argos (cf. Vollgraff, *I.L.N.* 13 Dec. 1930, p. 1065, the middle figurine of the three); and one from the Menelaion at Sparta (*BSA* xv, p. 125 fig. 5 no. 82): the Tegea specimen is noted below. Characteristic of Class F heads, apart from their mechanical adherence to the mass-produced type, is first the softening of the traditional squareness of face by an effort towards a triangle or 'gable' of hair above the forehead, which now tends to replace the low straight-cut mass or straight curl fringe of earlier types: it is probable that this step is due to Corinthian influence, which in this period of universal commercial expansion began at length to intrude into the very stronghold of the Argive fabric. The Corinthians had abandoned the low flat fringe (typical of protocorinthian terracottas) as early as 625, and only a few of the earliest Early Corinthian figurines have it. Now, at Argos, the change is tentatively begun, sometimes by adopting the Corinthian waved fringe entire, sometimes by arching the Argive straight fringe in an upward direction, thus giving a better proportion to the face. For the rest, the features are more delicate, chin and nose are fine and prominent, the former so much so that often the point may be seen to have been chipped away. In general aspect, however, Class F heads suffer from a certain deadness and monotony, as is natural in the products of an industry manufacturing in bulk: a glance backward at the heads of Class E will explain this better than words. The small bronze head from the mirror handle found at the Argive Heraeum (Pl. V, 7) has certain points of contact with our Class F, such as the broad head, delicate face and pointed chin: but the small nose and mouth are un-Argive and perhaps the bronze is not Argive at all: it most closely resembles a small bronze from Ptoion (Lamb, *Greek and Roman Bronzes*, pl. 35*c*), as Mr. Payne kindly points out.

So powerful was the Corinthian influence that in our next Class, G, we actually find heads used in the Argolid identical with those made contemporarily at Corinth: by contrast, the Argive technique remains rigidly conservative in its application of the thick slip and plastic jewellery and hair. Class G which completes the infiltration process, though of Corinthian origin, may not inaptly be termed the 'international' class, for its distribution includes Corinth, Perachora, Tegea, Argos, Boeotia, and even Attica.[1] To understand its place in Argive development, we must trace the origin and process of the Corinthian influence on the Argive style, though this can only be done in the very baldest outline here, and must await a fuller treatment elsewhere.[2]

[1] The Corinth and Perachora examples are unpublished: examples from Tegea and the Argolid are on plate 16. The Attic (? Boeotian) is in Eleusis museum. Boeotian, Nat. Mus. No. 5618. The type does not occur at the Heraeum or at Tiryns: in the latter place a later version of Class F takes its place; see below, p. 35 note 5.

[2] The development will be fully traced in the forthcoming publication of Perachora figurines. We must remember that where so many heads are small and indeterminate, it must suffice to indicate the general tendency of their development.

An examination of Corinthian terracotta heads in the Late Corinthian period—we are here concerned with the period *c.* 575–525—shows that they passed through three stages of development: we will call them for convenience L.C. I, II, and III. The face of L.C. I figurines is long, narrow, and U-shaped, with a well-modelled, but not protuberant chin, and characteristic triangular (generally steeply triangular) fringe of waved or, in less careful examples, of roughly blocked hair: this type, directly following on the Middle Corinthian, is the first Corinthian type which exercised a notable influence on its neighbours: for Tegea to the south owed her first moulded heads to this type; in plate 16, 1, 2, 3, the right and left-hand figures are L.C. I from Perachora, the centre is Tegeate: these three closely corresponding heads should be contrasted with the contemporary Argive Class C head (pl. 13, 5). To anticipate for a moment, we may note the remarkable fact that at Tegea Argive moulded heads were never used during the archaic period, but always Corinthian, although their handmade torsos and schemes of appliqué decoration remain fundamentally Argive throughout, as their handmade figurines had always been: it is odd to observe the successive Corinthian L.C. I, L.C. III and so-called *Spestypus* (L.C. IV) heads stuck into Argive bodies and covered in true Argive style with indented bands of applied hair.[1] We may contrast the equally provincial Tirynthian collection, which in general confines itself to Argive types, although a good example of an L.C. I head is seen in *Tiryns* I pl. iii no. 7 (I judge from the photograph, as the figurine is not exhibited at Nauplia); Tiryns lies under the aegis of Argos, while Tegea is at the periphery of the Argive sphere of influence, and is consequently more open to foreign influence.

With the L.C. II phase comes the abandonment of the long face, and an effort to produce a rounder, more spherical, type: this at first leads to a weakness of chin, and, in extreme cases, to a blowing out of the cheeks, very characteristic of this period. It is in this type first that one comes occasionally on the more superficial rendering of the eye, without outline or brow in relief, but merely a rough pointed-oval blob: this characteristic is not an indication of archaism, but due again to the dawn of the mass-production era with its attendant carelessness and indifference to details. Excellent L.C. II examples are in the Corinth museum and from Perachora: the small heads from the Athens pyxis (Payne no. 1306) are of this type, as is a finer but isolated specimen in Vienna.

The third, and for our purpose the most important Late Corinthian type (L.C. III) is the completed and standardised form of the somewhat

[1] This is well seen in the fine group of Tegeate seated female figurines in the National Museum at Athens (Nos. 4324–64). Two Argive Class F figurines are among them and a few are in the Tegea museum. The finds from Tegea include a surprising number of imported articles from various parts, such as Corinth, Sparta, Argos and Crete.

amorphous L.C. II heads: it shows a small short head, with large (roughly executed) eyes, chin confirmed by a sharp little horizontal ridge, and mouth definitely curving upwards: this is the first true Corinthian type to be taken over entire by Argos itself: it is our Argive Class G. The first two heads of our series (pl. 16, 4, 5) are from an interesting little group of women baking bread [1]: Dr. Kourouniotis who published it indicates that its provenience is unknown, but clay, style, and technique make it absolutely certain that the group was manufactured in the Argolid: we should note that just as the Argive spirit made the Tegeate coroplasts cover L.C. I heads with appliqué hair, so the same spirit has dealt similarly with these L.C. III examples [2]: secondly, that the group provides good chronological evidence for the survival unchanged of the handmade Argive type (of which the subsidiary figures are representative) down to this late date (*c.* 530). Plate 16, 6, 8, 9 are heads of small seated figurines; but the three best examples are appropriately from Corinth, where they are in the museum, but are not yet published.[3] The bronze statuette in the Fitzwilliam Museum (Lamb *op. cit.*, pl. 35 *a–b*) has this type of head: the object [4] is almost certainly Corinthian and we may perhaps narrow Miss Lamb's date of 550–530 down to 540–530.

We have now traced the course of Argive terracotta figurines by stylistic criteria down to, and perhaps somewhat beyond 525 B.C., where we will leave them: it is the history of the development of a conservative tradition, which expressed itself in a heavy square head, low forehead, and thick neck: it abjured all foreign influence save in the very short period immediately before and during the predominance of Class G: this speedily passed away, and the fifth-century Argive figurine returned to a refinement of the heavy square type with the prominence of feature.[5]

Chronology.

The absolute dating of Argive terracottas is difficult, as we have almost no fixed points established by external evidence; the case is in

[1] Nat. Mus. No. 5773. Ἐφημ. 1896 pp. 204 ff. Cf. Winter *Typen* I p. 34, no. 3.

[2] Of course handmade figurines from other sites have appliqué hair, but to add locks above hair which has been impressed from the mould along with the head appears to be a peculiarly Argive process.

[3] The identical style of these heads in various centres is another point in favour of the view that moulds were definitely exported from one site to another. Cf. *Tiryns* i p. 86.

[4] It stands particularly close to two plastic heads (from the same mould), one found at Corinth, the other at Perachora: neither is yet published.

[5] It will be noted that I have made but little use of the Tirynthian heads: as I have said above, they are almost all made after 550, and consequently have no bearing on the earlier archaic groups. Indeed they have only a few heads belonging to a period as early as Class F: the bulk of those figured in plates I and III are later. The type represented by *Tiryns* I pl. I is a later version of Class F and contemporary with the Corinthianising Class G.

marked contrast to that of Corinth, where plastic heads are often easily datable by the vases they decorate.[1] Nor does the established [2] chronology of the Corinthian series between 650 and 570 assist in the Argive, for the Argive style was, as we see, independent of Corinthian influence until the period of Classes F–G.

In this dearth of chronological data we must note as important the conclusion of Frickenhaus,[3] that early protocorinthian pottery was in use at the period when the earlier Argive Heraeum was being built; this gives a date probably in the last quarter of the eighth century for the construction of the temple; and stratigraphical evidence obtained by Walston shewed that all votive figurines from the sanctuary were posterior to this event.[4] It is reasonably safe to say, therefore, that no Argive Heraeum figurine is older than 725 B.C.[5]

If more were known about seventh-century Argive pottery, we might be helped to a tolerably secure dating for the heads A 1, A 3; indeed, a date somewhat before 650 for A 3 seems indicated on these grounds, though this the forthcoming publication will decide: 550 or thereabouts seems a very probable date for Class F, on independent grounds which will be treated of later with other such scraps of external evidence as we have been able to collect. It must, however, be said at once that the absolute chronology depends on the relative more than one could wish, and though a serious misdating of any class appears to the author improbable, yet in places the reader may disagree by a decade or more with the attributions proposed.

Previous efforts in this direction have not been altogether happy. The crudest handmade statuettes were dated by Walston to a pre-Mycenean epoch: and though Furtwängler corrected this mistake and indicated the eighth century as the earliest period to which they could be dated, Vollgraff subsequently revived the contention that the series went back to prehistoric times. Finally, Frickenhaus, in the only scientific article that the subject has received, dated the handmade series to the seventh century and the earliest figurines of which any part was made in a mould to the second half of the sixth century.[6] All these theories are incomplete or inaccurate.

[1] Cf. Payne, *Necrocorinthia* pp. 234, 236, etc.

[2] *Ibid.* pp. 232 ff. Where Corinthian figurines between 650–570 are referred to, Payne's dating is used without modification.

[3] *Op. cit.* p. 114.

[4] *Ibid.* p. 115: *Arg. Her.* II, p. 3.

[5] This at least prevents our dating A 2, as V. Müller does, to before 800. Admittedly the gap between this very archaic-looking specimen and A 4 appears a long one, but those who have not examined A 3 in Aegina must for the moment take it upon trust that the latter figurine forms a satisfactory middle point between the two.

[6] Blinckenberg (*Lindos : Fouilles de l'Acropole* I p. 27) quotes Frickenhaus' dating here to support his own dating for the emergence of the East Greek hollow figurine cast in two separate moulds. The citation is malapropos: Frickenhaus is not referring to any such

Thus, many of Walston's pre-Mycenean figurines may date as far down at least as 525: while Frickenhaus, though his conclusion holds good for Tiryns, goes much too far in the other extreme as regards the Argive series as a whole: moulded heads at the Heraeum being datable, as we shall see, at least to the second half of the seventh century.[1] A priori, Frickenhaus' contention is, one may say, impossible: when we consider the seventh century dedalic moulded heads from sites like Perachora, Cameiros, Sparta and from many places in Crete: and when we remember that the coroplast is hardly ever behind the sculptor in the archaic period, and yet that the lowest date ever given for Cleobis and Biton is still in or hardly out of the first quarter of the sixth century; we may well regard as incredible the hypothesis that up till 550 the Argive coroplasts had not progressed beyond a handmade grotesque with a bird's face pinched between finger and thumb.

The dating of the subgeometric head A 1 can be put with tolerable certainty in the last quarter of the eighth century: it belongs, no doubt, to one of the earliest objects deposited at the shrine. The style suggests a date as early as, if not earlier than, this, and the technique of incision, which the artist used for the hair, was in use in the earliest orientalising protocorinthian vases just before 700. Our head in profile may also be compared with that of Nessos on the very early orientalising vase figured in *Argive Heraeum* II pl. LXVII, which again can hardly be later than 700 B.C.

A 2, as we saw, is to be compared with a long series of geometric figurines; hence Müller's very early dating. But that it need not be nearly so old is proved by the discovery of a similar head at Perachora, which belongs to the latter half of the eighth century (cf. too the 'protocorinthian' plastic vase, Maximova no. 167): A 2 should also be dated to the last quarter of the century. A 3 must be dated before 650, unless (which is not impossible) Argive art lagged behind Corinthian in divesting itself of geometric tradition. We shall be safest in assigning A 3 to the second quarter of the seventh century, and putting A 2 forty or fifty years earlier.

The head A 4, Class B, and the Cleobis head (pl. 12) may be considered

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advanced process as this. Sixth-century terracottas at Tiryns—when moulded at all—are pressed solid from a single mould, and this process, though of late occurrence at Tiryns, had been current in Greece from the subgeometric period.

[1] Moulded heads and handmade heads need not—indeed must not—be considered as mutually exclusive terms from the point of view of careful modelling: moulds are, of course, themselves made from hand-modelled heads; but the carefully hand-modelled heads are so rare in comparison with the great frequency of, on the one hand, mould-made heads, and on the other of the cheap handmade (at Argos 'bird-faced') type, that the two latter classes may legitimately be referred to without further specification as well-demarcated opposites. I know of no *series* of well-modelled handmade heads save that of the late Class A pappades, and even these are naturally not all of the standard wherefrom moulds could profitably be made. Cf. Nat Mus. nos. 4009, 4010, B.M. B 56, 57, 58, etc.

together in some respects which may assist in determining their chronology. A 4 and Class B have some points of similarity, such as the cylindrical, stump-armed shape of the figurine, and the use of black varnish paint for hair, eyebrows, eyes and body. The similarity of hair in A 3 and Cleobis has already been noted, as has the close stylistic unity between Class B and Cleobis. A 4 is no longer in the geometric tradition, and yet the artist has not yet reached the stage of those who made the Class B heads. Now the cylindrical or quasi-cylindrical type of standing female figurine is very uncommon in the protocorinthian series, which prefers the flat plank-like body, such as we see also in A 3. Early Corinthian figurines, however, have the round body commonly. This may give us a clue; all three types are probably datable in the last quarter of the seventh century; we may suggest *c.* 615–610 for A 4, and *c.* 600 for Class B and the Delphi statues. Class C starts, as we saw, with two figurines which are the last to show the painted style of A 4 and Class B: they must be dated not much after 600, though they no longer embody the clear-cut dedalic formula of their predecessors. The Perachora head is later, though still without the fine comprehension of the head as a whole which characterises the Argive Heraeum head (pl. 13, 5), and leads on to the new era of Class E.[1] Pl. 13, 1, 2, are probably datable about 590, the Perachora head about 580, and the Argive Heraeum head about 570–560; Class D illustrates the process whereby the style of 13, 5 passed into that of 14, 2, by the development of a greater depth from front to back, and a better understanding of the relation of nose to mouth; 14, 1 is perhaps in the decade 560–550.

Class E is a homogeneous class which has yet a very long internal development. The first specimen is seen to follow 13, 5 at no long interval, particularly if one compares the two heads in profile: but the full face of the E head shews a marked advance. It should be dated about 550. On the other hand, the latest E head (14, 5) has progressed so far that the earliest looks like a caricature of it, and pl. 14, 4 is not much earlier; though both heads retain the old-fashioned dressing of the hair, and though the clumsy way in which the head of Pl. 14, 4 is joined to its wall-like neck can hardly be called an advance on the methods displayed almost a century before in Class B, yet the beauty of the modelling of the face makes it difficult to date

[1] The head on pl. 13, no. 5 certainly presents a more archaic appearance than the relative date here given would suggest. The nose if restored would project very considerably, and the chin too is prominent when compared with that of no. 3. The broad face recalls in general style the heads of a class of Corinthian plastic vases of which a good example is seen in *C.V.A. Oxford* ii pl. vii, 1, 2. These vases Payne dates to the Middle Corinthian period, *i.e.* the first quarter of the sixth century (*Necrocorinthia* p. 177). Against this early dating for the Argive head we may set the better rendering of the jaw, certainly more competent than in any previous figurine, and the fact that the head stands relatively close to the early head of Class D (pl. 14, 2) which though later has many points of close contact.

either head earlier than the last quarter of the century and pl. 14, 5 may even be datable as late as 510.

A date shortly after the middle of the sixth century for the beginning of the ornate Class F, associated with mass production, seems probable: it is generally agreed—and grave evidence from Rhodes supports the hypothesis—that about that time the local schools of Greece and Magna Graecia underwent the twofold experience of external inspiration and internal stimulus by the flooding of the western market with mass-produced figurines from Ionia: the familiar types of seated goddess with tall polos, fat-bellied grotesques, and above all the enormously popular standing Kore with bird clasped to her breast are found in large numbers in every site which provides a representative collection of archaic terracottas, and they emerge always about the middle of the century. This Ionic influence affects different local schools in different ways: stylistically, it appears to have influenced Sicilian fabrics most—at Selinus it is difficult to over-estimate the importance of the impression made. In Attica it called forth the seated and standing Ionizing types [1]; at Corinth, the rounded face of L.C. II, and the later standing Kore in chiton: Argos seems to have been principally affected by a less direct [2] stimulus given to international (inter-state, we should perhaps say) trade in figurines and the consequent demand for mass-production: foreign influences it did now begin slowly to absorb, but these were mostly Corinthian, from which sources they continued, as we saw, to imbibe steadily for the next two or three decades. What indeed Argos did probably derive directly from Ionia at this period was the use of the chalky slip for decoration of figurines; this, though not seen before on the mainland, except at Sparta, was used in Rhodian terracottas in the seventh century: and probably from Argos the usage spread to Boeotia.[3]

Now to assist further in determining the chronology of Classes F, G, we should look again at the Corinthian influences which were affecting them. We saw that of the three Late Corinthian groups which we distinguished, L.C. I followed hard on the Middle Corinthian group, so that its upper date will be *c.* 575; of the spherical L.C. II type we saw examples on the pyxis at Athens, which belongs to a group whose plastic heads Payne characterises as of late appearance: the date of heads of this type is probably 560–550. Another plastic head from a pyxis, found at the Argive Heraeum, gives a good example of an intermediate L.C. II–L.C. III head, and will be datable *c.* 550 (pl. 16, 6).[4] The third group (L.C. III), which was adopted without modification by Argos, shews

[1] Brook in Casson's *Guide to the Acropolis Museum* II p. 325.

[2] Unless we choose to regard the 'Ornate' decoration as coming in through Ionic intermediaries.

[3] See p. 32, note 1 above. On the East-Greek white slip see *J.H.S.* 44, p. 206.

[4] *Arg. Her.* II pl. LXVI.

in the Corinthian series the type of head which belongs to the very last specimens of a particular class of archaistic Corinthian 'support' figures starting about 630 B.C.;[1] these heads immediately precede the heads of the standing Kore and its seated counterpart (L.C. IV), which occupy the last quarter of the sixth century and some few years of the fifth. L.C. III, then, and the Argive Class G are to be dated *c.* 545–525.[2]

For convenience, we append a tabular chronology below:—

Argos.	Date.	(Corinth.)
Class A 1 (Subgeometric from A.H.)	*c.* 720–710	
,, A 2	*c.* 710	
,, A 3	*c.* 660	
,, A 4	*c.* 610	Early Corinthian
,, B } Cleobis and Biton }	*c.* 600	
Class C	*c.* 590–560	
,, D	*c.* 560–550	L.C. I (570–560)
,, E	*c.* 550–510	L.C. II (560–545)
,, F	*c.* 550 onwards	
,, G	*c.* 545–525	L.C. III
—	*c.* 525 onwards	L.C. IV

R. J. H. Jenkins.

[1] This too must be left unsubstantiated till the Perachora publication.

[2] There is, of course, nothing to disprove the hypothesis that Group F figurines, like Group E, continued to be made at the Heraeum and elsewhere until or even after 525, *i.e.* during the whole of the Group G period as well, an hypothesis perhaps more probable as no specimens of Class G have been found at the Heraeum itself: but if the large number of specimens suggest a long duration, their absolute uniformity must weigh on the other hand.

ANTISSA

(Plates 17–25)

Introduction.

The excavations at Antissa took place between May 29 and July 3. The most important area was that of the apsidal buildings, AC, but further exploration was carried out in the tombs south and south-east of the Acropolis, and tests were made on the promontory and the coast east of the promontory.

The working party consisted of myself, Miss Six and Mr. J. K. Brock for the duration of the dig, together with Mr. R. Cook for the last fortnight. Mr. Brock was in charge of the excavation of AC, and many of his notes and conclusions are incorporated in this report. Mr. Paraskevaïdes, Ephor of Antiquities, was present for four of the five weeks, and gave us invaluable help in archaeological and business matters. We would like to take this opportunity of expressing our gratitude to Professor Oikonomos for the many facilities provided for us at the National Museum.

The photos of the buildings are by J. K. Brock and W. Lamb; those of the tombs by N. Six and W. Lamb; those of the vases by Herr Wagner. The surveying and plans are by W. Lamb, with the exception of the map of the site, which is by Miss J. Mitchell, with the north part of the Castro and the trenches added by W. Lamb. Figs. 7, 8, 17 are by N. Six, Figs. 10–12 by Mr. Waterhouse.

Note on the Maps.—The large map of the site shows where tests have been made in 1931, 1932, and 1933. It includes the promontory with the Castro at its northern end, the Acropolis on the south, but not the hills beyond the Acropolis, where the tombs are. For these hills, see Koldewey's *Antike Baureste*, pl. 6.

Trenches A, C, J and P were discussed at some length in last year's report (*B.S.A.* xxxi, pp. 166 ff.). The polygonal wall (*ibid.* pp. 172 ff.) and trenches round it are marked E and I.

The larger scale maps and the sections of AC are numbered and lettered to correspond with the text.

Area AC: the buildings.

AC is situated at the north foot of the hill which we call the Acropolis. Bed rock drops here very steeply, as sections *AB*, *CD* show: the earth above the rock has subsided, partly owing to the changes in the level of the coast mentioned in last year's report, partly owing to the activities of Hellenistic Greeks described below. These three factors (drop of rock, subsidence of coast, disturbance of earth) must account for the differences

in the level of certain foundations. It is not, of course, surprising that foundations on the south which are more or less built on the rock should be higher than those of the same buildings in the north; but it is sometimes disconcerting to find that the foundations of later buildings on the north are lower than those of earlier ones on the south. There is also a drop from west to east.

I–II. THE EARLIEST WALLS.

(Pl. 18.)

The earliest remains are fragments of Lesbian Red Ware belonging to the close of the bronze age. They are very scanty on this part of the site, and can only be recognised in the first fifty centimetres above sea-level, below which water prevents excavation (see section *CD*). The low level wall marked I in plans and sections may or may not belong to this period: the prehistoric sherds are below it, and beside it are poor-quality bucchero [1] and coarse red wares. Wall II is probably but not certainly contemporary with I.

III. THE EARLY APSIDAL BUILDING.

(Pl. 18 and Pl. 19 Nos. 1, 2, and 6.)

Architecture.

The Early Apsidal Building (pl. 18) is built with its northern, and some of its western, foundations on the rock. Its walls, constructed of small blocks of the local limestone, are only ·45–·50 m. wide, but are in one place preserved to a height of 1·85 m.: its length is 17·25 m., its width 5·60 m.

The apse (pl. 19, no. 6) is at the eastern end. On the west there must have been a shallow porch, for the north-west wall, projecting slightly beyond the cross wall *a*, ends in a distinct anta. This anta is emphasised by a single stone running across the width of the wall.[2] The corresponding wall on the south-west has unfortunately been broken off.

Four cross-walls divide the building. The most westerly, *a*, rests partly on the rock, partly on the low wall II. The diagonal cross-wall *b* looks quite unorthodox, the more so as it gives the impression of being prolonged by the curved excrescence, *g*, outside. The foundation of *g* is, however, ·50 m. higher than that of *b*: the inference is, of course, that both *b* and *g* were built with due reference to the main north wall

[1] In this paper I use the term bucchero rather than grey ware to indicate grey pottery of the classical period.

[2] Cf. the early temple at Vroulia; Kinch, *Vroulia*, p. 9.

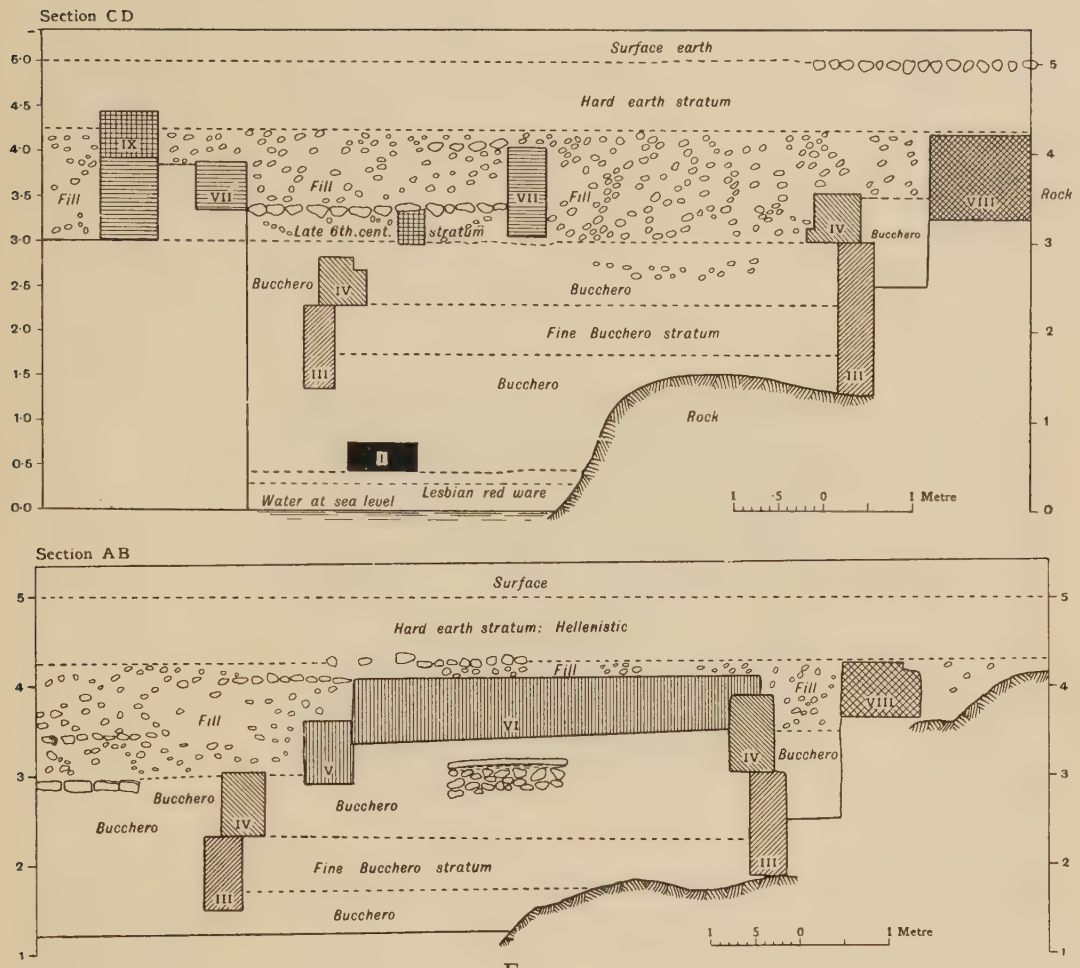

Section CD
Surface earth
Hard earth stratum
Fill
Late 6th.cent. stratum
Bucchero
Fine Bucchero stratum
Rock
Water at sea level
Lesbian red ware
1 Metre
Section AB
Surface
Hard earth stratum: Hellenistic
Fill
Bucchero
Fine Bucchero stratum
1 Metre

FIG. 1.

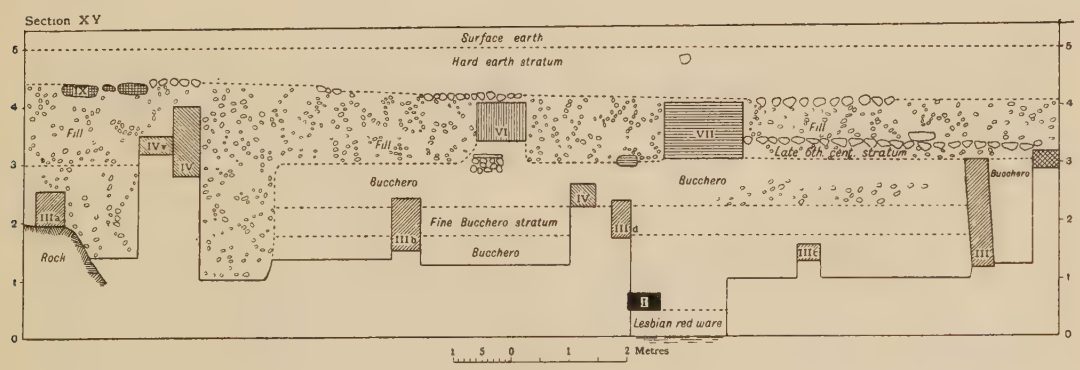

Section XY
Surface earth
Hard earth stratum
Fill
Late 6th cent. stratum
Bucchero
Fine Bucchero stratum
Rock
Lesbian red ware
2 Metres

FIG. 2.

of the apsidal building. The foundations of the latter and of *b* are practically the same (fig. 3), and, though not bonded (which would be unusual with such small stones and with so primitive a construction) they appear to be contemporary. The foundations of *e* are nearly as low as those of the main wall, those of *f* quite as low. Notice that the upper courses of the main wall have been removed between *e* and *g*, that *e* has a good face on the west but not on the east, and that the top course of *g* runs distinctly over that of *e*. Is it possible that there was originally a side entrance, screened by *e*, over the low part of the main wall? If *g* was subsequently built to close that entrance, there must have been some

Fig. 3.—North Wall and Cross-wall.

reason for creating an alcove in preference to blocking the door. Wall *f* disappears in the side of the trench, but whether useful information would be obtained by extending the trench on that side is doubtful. Another wall outside the main building is *h*, which runs under the stoa on the south.

The cross-wall *c* has only one course preserved (pl. 19, no. 6): it cuts off a small, roughly-paved room inside the apse. It may have been pulled down before the erection, at a later date and higher level, of *d*.

Dating and Pottery.

For dating purposes we have firstly the evidence of the pottery discovered in and below the building. This consists of bucchero and indefinite red wares, together with a few imported geometric sherds, Rhodian and others (see pp. 57, 58). To a slightly higher level inside, 1·75–2·25 m., belongs a particularly rich deposit of bucchero, most conspicuous in the rooms at either side of wall *b*. Protocorinthian, of which one or two

sherds had appeared in the geometric layers, now begins little by little to assert itself.

It will be seen that the successor of our building must have been built in the eighth century (see p. 47). That the earlier apsidal building, now under discussion, itself survived into the eighth century is shewn by the Protocorinthian in its upper layers. The geometric sherds found inside and below it suggest that it was built in the ninth or tenth centuries; those from below, very few in number, may, of course, have percolated so that the walls could antedate them.

Function.

Were the two apsidal buildings at Antissa temples? The arguments against their being temples are, (1) the walls *e–h* outside the main walls, and (2) the absence of conspicuous votives. The arguments for their being temples are, (1) the large deposit of fine bucchero (including phialai) in the early building; (2) the presence of good imported pottery; (3) the repetition of the unusual apsidal form by the later building, suggesting a hieratic tradition; (4) the parallels enumerated below.

The question of the votives requires further comment. The later building may have contained them, for, as will be shewn, most of it was emptied at a late period and then filled with miscellaneous dump. Fragments of fibulae occur in both buildings and decorated bone in the early one. It may be that the citizens of the geometric period confined their offerings to pottery, bone and fibulae: certainly they deposited here imported foreign wares which must have been precious, and, to judge from previous excavations at Antissa, not easily obtained.

As for the walls *e–h*, they are not conclusive, for we have no reason to expect complete isolation in temples of the early period to which our structures belong.

Parallels.

Megaron A at Thermon is now regarded as definitely prehistoric. The temple at Gonnos in Thessaly[1] appears to be contemporary with ours but differs in having a more rounded outline, like an incomplete oval. The two models discovered by Mr. Payne at Perachora are nearer, since they have an apse at one end, a porch at the other: they belong to the geometric period, thus supporting the date suggested above for the remains at Antissa.

IV. THE LATER APSIDAL BUILDING.

(Pl. 18 and Pl. 19 Nos. 2, 4.)

The apse of the later building is on the west, and it would be interesting to know what caused this change of orientation. North wall,

[1] Πρακτ. 1910, pp. 252 ff. and 1911, pp. 315 ff.

south wall and apse are built of a polygonal masonry so distinctive that it would be impossible to confuse their construction with that of their predecessors.

The foundations of both north and south walls rest partially on the walls of the earlier building, but in many places, especially on the north, they overlap the edge only, since the earlier building is wider (sections *AB*, *CD*). The later building is usually only 5·25 m. wide, but in one place is 5·50 m. wide. Its base is 3·05 m. or thereabouts above sea level on the south wall: beneath the apse it drops steeply but steadily to 2·65 m. at the west end of the north wall: along the north wall it descends in steps. Evidently, therefore, the fall from west to east had already made itself felt at the time of building. Occasionally, wide, thin slabs of stone are used for the lowest course, projecting beyond the face of the wall (pl. 19, no. 2, foreground).

Some of the upper courses of the south wall have shifted; a small piece fell in 1932 and we supported the south-west corner as much as possible during excavation. At the south-east end the wall is distinctly thicker than elsewhere.

At the east end is the cross-wall ii, with its south end built directly on the early apse. This south wall drops at its surviving northern end, partly owing to subsidence of fill underneath, partly because the main south wall is higher than the main north wall.

The foundations of the low cross-wall i are at the same level, exactly, as those of the main north wall, but its south end is altogether lower than the foundations of the main south wall. In spite, therefore, of its close connection with the north wall, it may be earlier than the building of which it seems to form a part.

Was there ever a porch at the east end of the building? Section *XY* shews that the early apse is preserved to a considerable height in the area where such a porch should be, so that its floor would have to be 3 m. or more above sea-level.

The theory that both apses were for a time used simultaneously, in other words, that bits of the early temple were incorporated in the later one when it was first built, would explain (1) the surviving height of the east apse, (2) the cross-wall i, and (3) the difference in the depth of the foundations.

In the west apse is a doorway (pl. 19, no. 3), blocked up with smaller stones at a later date, perhaps when walls iii and iv were built. These walls look like buttresses to support the apse, which may have been, then as now, unstable. The single row of paving stones v may belong to the same date.

Hearth or altar. A flat slab of burnt earth with black earth below it rests on a heap of stones inside the building (vi). (It can be seen

in pl. 19, no. 4.) The burnt earth is very hard and as much as 5 cm. thick. It is 1·30 m. long from north to south, but was cut away on the east and west when the area was disturbed at a later period (see below).

Close to it were fragments of a terracotta moulding, reversed.

Is the burnt area an altar? Altars and sacrificial pits inside temples occur in the geometric and early archaic periods. On the Greek mainland there is a pit bordered with stone, in the temple of Hera Akraia at Perachora,[1] a 'ἑστία' at Longa, altars in the two temples near Bassae and an altar at Gonnos. In Crete there are several examples: a pit at Gortyn; a hearth at Dreros; two pits in two separate temples at Prinias. Vroulia in Rhodes has altar and pit. Nearer topographically is the temple at Neandria, where Koldewey observed 'zwei Fundamente, wahrscheinlich von Altären, und einige Statuenbasen.' Epigraphical evidence for a later date is given by an inscription from Kos: Θύ[εται] ἐπὶ τᾷ ἱστίᾳ ἐν τῷ ναῷ, and literary references are not unknown.[2]

Date. Below the walls we found bucchero only. The small areas of undisturbed earth inside the building contained mainly bucchero with a sprinkling of Protocorinthian and East-Greek. The building was succeeded by the two large walls (V, VI in pl. 18) which we date well before 600 (see p. 48): it was preceded by the early apsidal building which we have reason to think came to an end early in the eighth century (see p. 44). The inference from the pottery is that our later or polygonal apsidal building was erected in the eighth century: it survived probably into the seventh.

Unfortunately, it is mostly filled with alien matter: quantities of small stones and earth containing Hellenistic black-glaze pottery mixed with archaic wares which look like the remains of the original temple deposit. Just inside the apse there is a particularly deep pit or well, containing Hellenistic sherds as low as 1 m. above sea-level. Evidently the later apsidal building was dug into by plunderers or cleared and filled in by later builders. It is noticeable that under the large walls V, VI there is a pure archaic stratum, whereas a glance at sections *XY* and *CD* will shew that there must have been a certain amount of digging down on either side of them at a later date.

Function.

The arguments for and against the building being a temple have already been given on p. 45.

[1] *J.H.S.* lii, p. 240. The other references are as follows:—Longa, Δελτ. 1916, p. 83. Kotilon near Bassae, Ἐφημ. 1903, pp. 159, 163. Gonnos, see p. 45, n. Gortyn, *Mon. Ant.* XVIII, p. 206, fig. 15: Dreros, Δελτ. 1918, Παράρτ., pp. 25, 26. Prinias, *Annuario*, 1914, p. 22, fig. 6. See also Robertson, *Greek and Roman Architecture*, pp. 56, 57. Vroulia, Kinch, *Vroulia*, pp. 8 ff. Neandria, Koldewey, *Programm zum Winkelmannsfeste*, 1896, p. 23.

[2] *J.H.S.* ix, p. 328; see *R.E.* ii col. 1648.

Parallels.

The apsidal form is obviously due to tradition, and the only parallels are those of the geometric period mentioned in connection with the earlier apse. It remains to discuss the type of building. Its nearest counterpart is the late seventh-century wall belonging to the earliest Telesterion at Eleusis: [1] there, as here, small stones are used to fill awkward corners. The curved outlines of the stones and their relation to Aristotle's Λεσβία οἰκοδομή[2] were alluded to in last year's report.[3] For the position of the altar, see above.

THE WALLS V AND VI.

Under these walls, which are bonded, and part of the same construction, we found bucchero, a little Protocorinthian, and one Rhodian sherd.[4] This suggests that both walls were built in the seventh century, and that the people who disturbed the deposit in this area dug down on either side of them. They are made of particularly large stones which anyone would hesitate to remove. No. V is conspicuous in the foreground of pl. 19, no. 4.

VII. PAVED AREA AND POLYGONAL WALLS.

(Pl. 19 No. 5 South Side, and Fig. 4, North side.)

Architecture. The construction of a paved area with fine polygonal walls on either side marks a new development. The polygonal walls are not quite parallel, and we do not know their exact relation to each other though both are associated with the paving. The south wall shews a careful finish only on the street face: at the back of the north wall at the eastern end is a packing of slabs like those behind the terrace on the Acropolis.[5] Traces of a threshold and entrance can be seen on the south wall. The wall V rises above the paving, so was probably extant when it was laid down.

The paving itself recalls the streets of modern villages, and like them has a row of thin stones down the middle. A series of stones laid in a curve give the illusion of yet another apse (pl. 19, no. 5), and prolongs the

[1] Noack *Eleusis*, pp. 11, 16; Pl. 20 *a*.

[2] Aristotle Ἠθικὰ Νικομάχεια *E* 1137 *b*, 30. Noack, *op. cit.* pp. 16, 17. Weickert, *Das Lesbische Kymation*, pp. 8 ff.

[3] *B.S.A.* xxxi p. 171.

[4] Two black-glaze fragments seem to have been found under wall V, though they were not observed during excavation. We think they were strays. If, on the other hand, they are the result of the wall having been built at a later date than is suggested above, on ground cleared of its later strata, they must be regarded as contemporary with the late sixth-century material from under the pavement VII.

[5] *B.S.A.* xxxi, p. 172.

line of a fragmentary polygonal wall below, which is too small and isolated to merit discussion here. Another curve occurs further east.

Remains on the north shew that the paving has been three times renewed: it seems to have been cut away, leaving a regular edge, when the apsidal building was dug out.

Fig. 4.—Paving and North Wall.

Dating and Pottery. Some of our choicest sherds were found beneath the paving, as follows:—

Rims, handle-plates, and other fragments of two to three Corinthian craters. Part of the foot of a large Lakonian vase. Bits of a Rhodian plate, and of a Rhodian bird-bowl. Also some Protocorinthian; four rather late Attic black-figure fragments of which one appears in pl. 24, no. 14; some Attic black-glazed fragments, probably contemporary; lots of bucchero and coarse red ware.

One black-figure sherd and some bucchero were found under the south wall. It seems probable, therefore, that the whole complex was erected at the close of the sixth century or the beginning of the fifth.

VIII. THE STOA.

(Fig. 5.)

Walls. South of the apsidal buildings is a long narrow structure, 4·80 m. wide at the west end. Its length is unknown, since it has not been fully excavated on the east side. On the west face of the West wall, two foundation courses project, one below the other, like narrow steps. The wall above them is of polygonal masonry.

On the north face of the main wall only the foundation courses are preserved, and even these have become displaced at intervals. Inside are the boulders of the rock on which the stoa is built which shew that we are well below the floor level. One cross-wall has been uncovered.

Fig. 5.—Stoa: North-West Corner.

Dating and Pottery. The date is uncertain. No pure deposits of pottery have been obtained, but the relation of the stoa to the other buildings suggests a date in or after the fourth century.

IX. MISCELLANEOUS.

In the north and east are remains of good thick walls at a high level, two of which, with rough cobbles between, seem to carry on the tradition of the paved area VII and possibly represent a street. Patches of cobbles occur all over the site at the same level, and remnants of narrow undistinguished walls. All these are associated with late pottery: stamped saucers, black glaze with white decoration, etc. In the north-west (partly above IV v and partly outside) is the lowest course of a wide wall near which the skeleton of an animal was found: the sherds from beneath the wall consist of 80 per cent. bucchero and coarse black, 10 per cent. coarse red (which need not be late: see p. 51) and three black-glaze sherds, possibly intrusive, from the edges. The character of the deposit is, in short, archaic of an indefinite character. Perhaps in the period immediately following the later apsidal building there was a steep slope upwards towards this wide wall and the wall itself escaped the subsequent disturbance in and around the apsidal building.

X. LATE HELLENISTIC OR HARD-EARTH STRATUM.

Above all this is a stratum of hard, dark earth containing Hellenistic pottery and many fragments of Hellenistic terracottas (pp. 61, 62). Similar strata were found on the promontory in 1931, also associated with numerous terracottas, and in 1933 in a test A.I. 42 m. north-east of AC. The wide extent of this deposit is an argument against its having been washed down from the Acropolis. Its consolidated condition looks, nevertheless, like the effect of moisture—probably surface moisture constantly soaking in. To what building the terracottas belonged we cannot say.

Pottery: 1. Bucchero.

GENERAL REMARKS. The majority of our finds consisted of the native Lesbian Grey Ware,[1] often called bucchero. As a class it is interesting because still comparatively unknown. The material found this year adds something to our small repertory of shapes,[2] and gives a good impression of the curiously individual fabric. The rarity of complete vases is much to be regretted, for we must look to shape rather than decoration for evidence of foreign influence. Attempts to join up the scattered sherds were to a certain extent repaying, but less so than we hoped.

In the geometric and early archaic periods both fine and coarse wares were grey, the latter often unpolished and badly fired. During the archaic period, a hard red ware came into use, unpolished but sometimes decorated with incised wavy lines (*Wellenlinien*).[3] It displaced the coarse grey wares for common purposes, while the choicer polished wares for a time held their own. After the sixth century, however, these too decline in quantity and seem ultimately to have been supplanted by Attic black-glaze wares. My account deals chiefly with the fine wares since they are more significant, more numerous and much better preserved.

TECHNIQUE. The wares are usually light grey and sometimes reddish on the break, while the surface varies from silver-grey to gunmetal according to whether the surface has been polished, enhanced by a wash, or left rough.[4] Pl. 22, no. 3 shews a rare type of bowl where the wash, usually disguised, is used openly to decorate the vase and emphasise

[1] See *J.H.S.* lii, pp. 1 ff.; also Jacobstahl and Nueffer, *Gallia Graeca* pp. 16 ff.

[2] This account includes some whole vases from the *mandra* (p. 63) with the pottery from AC in order to give a more complete series of shapes. The vases from the tombs which we dug ourselves, and which contained hardly any bucchero, are treated separately.

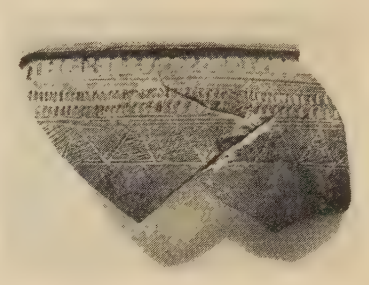
[3] *J.H.S.* lii, p. 5.

[4] See *J.H.S.* lii, p. 3. The series described by Jacobstahl and Nueffer evidently includes no specimens with wash (*op. cit.* p. 16).

the shape. Amongst thousands of sherds, only one shews traces of white paint.

RED AND BUFF EQUIVALENTS OF THE GREY WARE. They are so well made that one is tempted to think that the colour was intentional. See pl. 22, no. 6, pl. 24, no. 18.[1] The former, indeed, seems to be slipped.

a



b

c

FIG. 6.—BUCCHERO.

SHAPES. To the period of the early apsidal building, *i.e.* the geometric and the beginning of the archaic period, belong the following shapes:—

Deinoi, craters, etc. fragments only (*e.g.* pl. 22, no. 11 and fig. 6 *b*, *c*).
Wide bowls or dishes, fragments only (*e.g.* fig. 6 *a*). For the handle cf. Jacobstahl and Nueffer, *op. cit.* p. 29, fig. 29.

[1] These two pieces were from the fill, but the red and buff wares are well represented in the early apsidal building.

Amphorae, either small and polished like pl. 21, no. 13, which is decorated with four rows of wavy lines, or large, unpolished, with twisted or plain handles.

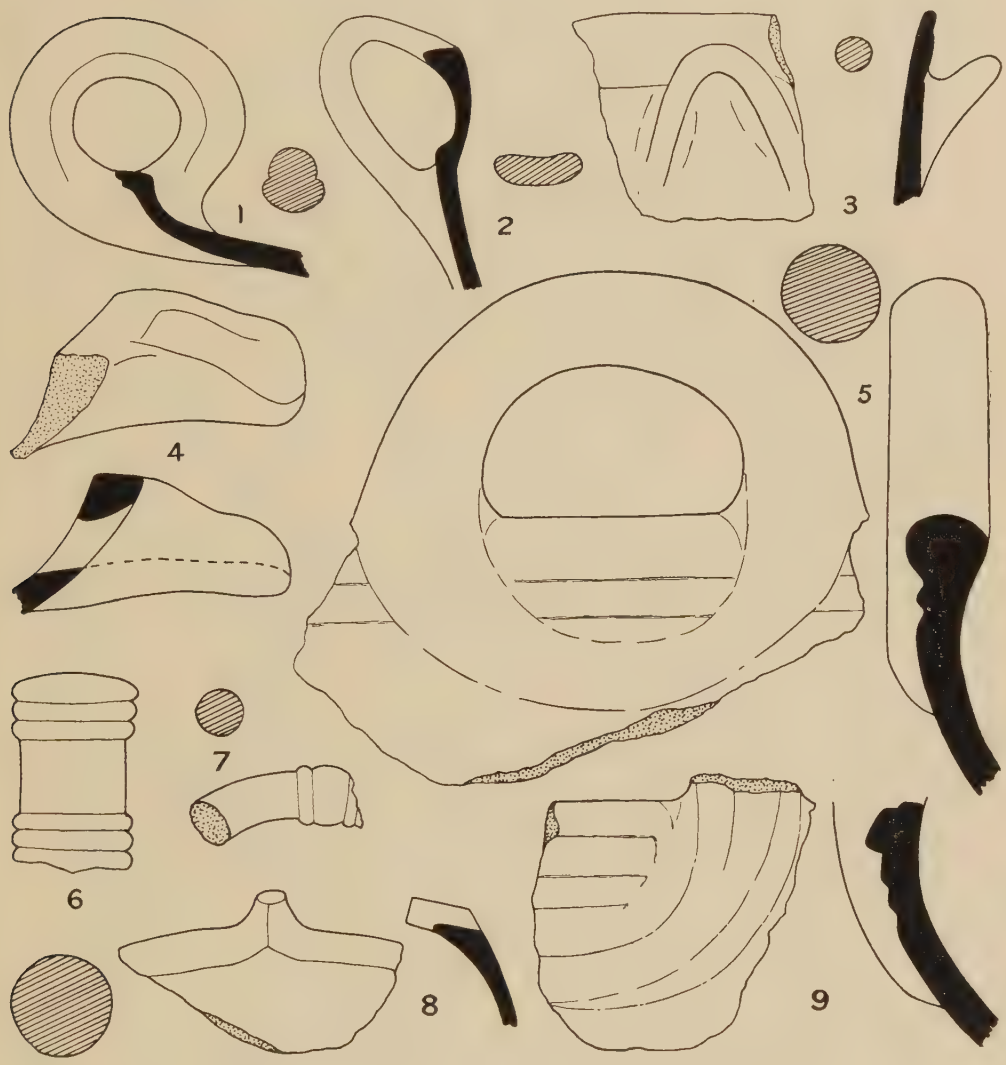


FIG. 7.—BUCCHERO.
(Scale 1 : 2.)

Jugs : round-mouthed or trefoil-mouthed (*e.g.* pl. 21, nos. 12, 14, 15). The spouted jugs from the tombs *B.S.A.* xxxi, p. 175, fig. 5 may be contemporary or a little later.

Two-handled bowls, very characteristic, like pl. 20, no. 6.

Cups : wide low cups, as pl. 21, no. 4, or narrow high cups as pl. 21, no. 10. Compare the cups from the tombs, *B.S.A.* xxxi, p. 175, fig. 5, which may be contemporary.

Kantharoi : The metallic form, pl. 20, no. 1 (= *B.S.A.* xxxi, pl. xxvii, no. 4) is so far unique. The usual type is pl. 20, nos. 4, 5. Though 4 is from the stratum under the street containing late sixth-century material, and 5 from a tomb found last year, they are represented by many fragments in the geometric stratum, and no. 5 is a typical geometric shape. The sixth-century kantharos no. 3 (= *B.S.A.* xxxi, pl. XXVIII, no. 3) is their direct descendant. All, except the ' metallic ' no. 1, have oval mouths.

Phialai : pl. 21, nos. 6 and 11, the latter from the *mandra* (p. 63), and fragments.

Platters or discs, plain, thick and rimless, may, like the phialai, have been for ritual use.

Double side-handles, like pl. 22, no. 21, may belong to more than one class of vase.

Knob, fig. 7, no. 6; possibly from a lid.

Of the remaining vases on pl. 21, nos. 1, 3, 5 and 7 come from tombs and can be dated by style alone (late geometric–early archaic periods?). No 2 is from below the paving where the sixth-century material was found; nos. 8 and 9 are from the ' fill.'

In the archaic period, shapes are hard to reconstruct, since the fragments from the ' fill ' are small. We can distinguish rims of deinoi and craters (fig. 8, nos. 20, 30); rolled handle-attachments of side handles belong to hydriai (pl. 24, no. 22); handles of skyphoi imitating the Protocorinthian form; handles rising straight up from the rims of unidentifiable vases; imitations of the large ring-handles of metal vases (fig. 7, nos. 5, 9); feet of stands like those in *J.H.S.* lii, pl. 1, no. 3; rims of pedestalled plates like *J.H.S.* lii, p. 12, fig. 5. Many of the older forms, no doubt, survived.

In shaping their vases, Lesbian potters were, as one would expect, influenced by Rhodes, Corinth and elsewhere, and they used not only fictile but also metal prototypes. Whatever they copied was, however, modified by their individual taste and their curious technique. On the whole they seem to have liked their vases to be plump and heavy.

DECORATION. The most characteristic decoration consists of deep or shallow grooves and ridges. These could be made with a blunt tool while the vase was turned, or if specially thick ridges were required, by applying strips of clay. A tendency towards plastic ornament is notice-

Fig. 8.—Bucchero.
(Scale 2 : 3.)

able from the earliest period. We find it—to quote a few examples only—in the bands and nail-heads of the prehistoric grey crater *B.S.A.* xxxi, p. 170, fig. 3, in the nail-heads of the early kantharos pl. 20, no. 1 and *op. cit.* pl. XXVII, no 4, and of certain later bowls (fig. 8, no. 41) and on two handles from the 'fill,' one of which is adorned with a twist, like string, the other with a spiral, like a snake (pl. 22, nos. 2, 7). The prettiest piece of relief work is undoubtedly the rim pl. 22, no. 4.

The *incised geometric style*, well represented in the early apsidal building, is illustrated by the group of sherds on the lower part of pl. 22 (except nos. 15, 21) and by fig. 6. The most characteristic feature is the meander, often combined with borders of stamped triangles in a single or double row.

A type of decoration much more intimately connected with the Aeolic area is the *wavy line* or *band of wavy lines*, of which the latter is made by a toothed instrument like a comb. Among countless examples found on the site I have illustrated only those that are associated with definite vase-forms, *e.g.* the bowl pl. 20, no. 6 which is decorated on lip and body. For history and discussion of the *Wellenband* see *J.H.S.* lii, p. 5.

The fragmentary inscription +ος, pl. 22, no. 5, recalls the Εὔμαχος kantharos found last year.[1]

2. Imported and Uncertain Wares.

Apart from the prehistoric Lesbian Red Wares (p. 42), which are, on this part of the site, too poor to merit description, and the more primitive pieces of Lesbian bucchero, the earliest sherds are protogeometric. There are four or five of them, decorated with concentric circles and semicircles, from inside and below the early apsidal building. They belong to more than one fabric, which cannot with accuracy be identified. Three appear on the left of fig. 9 (*a*, *b*, *c*), one reversed.

A number of geometric fragments with brown decoration on buff were found in the early apsidal building, and one or two in the later. To attribute all of them to their proper sources is not yet possible, but since it may become possible some day, I have illustrated known and unknown alike on pl. 23. Nos. 6, 8, 16 and 21 have a reddish paint; no. 12 is distinguished by red paint and red clay, and may be local (see p. 57). Nos. 6 and 16 are handles, nos. 21 and 22 feet, no. 15 is from a jug, nos. 1–5 and 8 are rims of cups or bowls.

The cup or crater no. 3 on pl. 24 was found in fragments in the early apsidal building. Brown paint, covering the interior; buff clay; ht. 9·7 cm. Compare the crater from Samos, *A.M.* 1929, p. 32, fig. 24, no. 4.

That the unidentified fragments on pl. 23 should be local seems

[1] *B.S.A.* xxxi, p. 178, pl. xxviii, no. 3.

improbable, since they occur in such small quantities. There is, however, a class of painted ware which may be native to the island. It is represented here by some sherds from the fill of the later building, decorated with wavy lines and other simple patterns in red paint on red clay (Fig. 9 *d–g*). There is not yet enough material to enable us to study the fabric, or to decide at what period it was made.[1]

Fig. 9.—Protogeometric and Local Wares.

Passing on to the sherds which belong to known centres, we can distinguish Cycladic, Rhodian, Corinthian, Naukratite, Lakonian and Attic wares.[2]

Cycladic.

Pl. 23, no. 9 from the early apsidal building. For the type, cf. Buschor, *A.M.* 1929, p. 145, fig. 2, and p. 144, fig. 1.

[1] The preference for wavy lines recalls the class discussed by Technau, *A.M.*, 1929, pp. 29, 30, but the Antissa examples, besides being of different clay, shew the motive multiplied.

[2] The sections on geometric and orientalising wares are indebted to the assistance of Mr. Payne.

Rhodian.

Geometric. A few fragments, including nos. 3 and 4 on pl. 23, from inside the early apsidal building. For no. 3, cf. *B.C.H.* 1912, p. 501, figs. 7 and 8, from Thera.

Bird bowls, e.g. pl. 23, nos. 20, 26. Nine fragments were found both in the early and in the later apsidal building. All have decoration in brown paint on buff clay, save one which is slipped. Early seventh-century B.C.

Transitional (probably Rhodian), pl. 23, no. 28. Uncertain shape. Red clay, white slip, brown paint.

Camiran A. Besides the pieces illustrated there were a number of poorer fragments, one or two of which came from plates. All were found in the deposit or fill of the later apsidal building.

Pl. 24, no. 4. Part of a jug. Buff clay, white slip, red and brown paint. In a panel on the shoulder is a water-bird between rays.[1] First half seventh century.

Pl. 23, no. 24. Uncertain shape. Red-buff clay, buff slip, brown paint. Decoration, a lion following another animal. First half seventh century. Inside, red bands, no slip.

Pl. 23, no. 27. Fragment of plate or dish. Red-buff clay, white slip, brown paint. Bands on back. Sixth century.

Pl. 23, no. 29. Fragment of plate or dish. Fabric as last but of finer style. Third quarter seventh century.

Pl. 23, no. 30. Part of a dish. Red-buff clay, white slip, brown paint, with purple enhancements. On the back, bands of the usual type. Last quarter seventh century.

Late Sixth-century Bowl. Pl. 23, no. 2.

Protocorinthian.

A large quantity of fragments were found, both in the earlier and later buildings. Cups and kotylai are represented. Of the latter, many resemble no. 1 on pl. 24 which was found in the *mandra* (p. 63). Others are of the type of no. 2 on pl. 24 (handles missing) from the later building.

Nos. 18, 19, 23 and 25 on pl. 23 shew various forms of decoration, of which no. 25, Mr. Payne informs me, is uncommon. For the birds on no. 23, cf. Payne, *Protokorinthische Vasenmalerei*, pl. 4, no. 3, etc.

Corinthian.

Besides the bases of two or three round aryballoi from the fill, bits of large craters were recovered from beneath the paved area VII. These

[1] Price, *Classification*: *East Greek Pottery*, p. 12, type B.

consist of rims decorated with palmette and lotus, two handle-plates, and pieces of the body of a vase shewing boys riding (white ground). They belong to either two or three craters which may be dated in the first quarter of the sixth century. It is proposed to publish them separately, as they require to be drawn rather than photographed.

Naukratite, Probably from Chios.

Pl. 23, no. 31, from the fill in the later building. Fragment of chalice. White slip, red paint, which covers interior. Seventh century.

Lakonian.

To this class belongs the foot, found beneath the paving VII, of a large crater belonging to the type mentioned in Payne, *Necrocorinthia*, p. 330, note 1. Cf. *C.V.A. Louvre* I, Class III, D.c. pl. 6 nos. 1 and 2.

Attic.

Black figure. Pl. 24, no. 5. From fill outside apsidal buildings. Fragment of deinos or krater. Heads of maenad and man. Red details. Interior black. Last quarter sixth century.

Pl. 24, no. 6. From Pit AJ, near chapel. Man's head, from shoulder of hydria? Late sixth century.

Pl. 24, no. 10. From fill inside later apsidal building. Satyr. Red beard. Interior black. Late sixth century or early fifth.

Pl. 24, no. 9. From under the wall mentioned on p. 49, top. Fragment of krater. Satyr's head; tongue pattern, with alternate tongues red. Interior black. Middle sixth century.

Pl. 24, no. 14. From below paving VII. Head of man: two spears. Red details. Interior black. Date as no. 5.

Pl. 24, no. 15. From fill outside the apsidal buildings. Part of woman and of soldier carrying shield. Red and white used for details. Interior black. Middle sixth century.

A few other examples were found which do not deserve illustration.

Red Figure. Pl. 24, no. 7. From the fill. Fragment of kylix, shewing on interior a foot against some object, pillar or post, which is reserved. Relief contour. Reverse, black. Late sixth century.

Pl. 24, no. 8. From the necropolis, inside a fragmentary amphora. Head of youth, from the shoulder of a deinos? Relief contour, and relief for outline of ear. Second quarter fifth century.

Pl. 24, fig. 12. From the fill outside the buildings. Below ivy garland, head of woman and part of a thyrsus. No outline: curls, brown. Interior, black. Bell-krater. *Ca.* 520 B.C.

Pl. 24, fig. 13. From fill outside the buildings. Arm of woman with torch, satyr's head, and part of another torch. Relief contour for face and arm of satyr. White for flames. Preliminary sketch visible on the arms. *c.* 530–520 B.C.

Pl. 24, fig. 17. From fill inside the building. Fragment of bell-krater or calyx-krater. Legs of boy, and two women. Relief contour for scarf only. Interior black. Late fifth century.

Black-glaze Wares.

A quantity of fragments and some complete vases were found in the fill both inside and outside the apsidal buildings. Still more numerous fragments lay packed in hard red earth which lay just below the surface (p. 51).

The favourite types seem to be dishes with stamped interiors (like *C.V.A. Cambridge*, I, pl. xli, nos. 18–21: see Technau, *A.M.* 1929, p. 43 and fig. 32 on p. 44), kantharoi and krateriskoi. The two latter may have plain or reeded bodies, and necks either plain or decorated with incised and painted garlands. They are of shapes common at the period and particularly well represented at Samos, e.g. *op. cit.* p. 46, fig. 34. For the Attic originals and Samian copies of these black vases see Technau, *op. cit.* pp. 43–6. Plates, like the one *op. cit.* p. 46, fig. 35, seem to have also been in use.

Our kantharoi have plain thumb-rests on the handles, or trefoil-shaped thumb-rests like no. 16 on pl. 24, which are very frequent. A slightly different form of kantharos-handle has no thumb-rest but two reels at its apex. Cf. *C.V.A. Oxford*, II, pl. lxv, no. 3, a kotyle from Rhodes belonging to the third or second century, and the references given in connection with it.

Several examples of rims adorned with leaf-like projections were found—the best is no. 11 on pl. 24.

Terracotta.

Fig. 10 represents a terracotta object found in pieces in the fill. It is 29·5 cm. long, 17·8 cm. wide and 9 cm. high. The clay is blackish inclining to red on the break: the surface is black and well polished. There was originally a handle on the top. Inside is an oblong cavity with three outlets: the section shews that the lower part is incomplete. On the top is an incised pattern; there are similar patterns on the sides. Beneath the rolled moulding, however, the edge is broken and we do not know how the object was finished off.

Its purpose is obscure, and it is published here in the hope that some explanation or parallel may in time be forthcoming.

The terracottas from the hard earth stratum where so much of the black-glaze ware was found are never in good condition. The soil, which

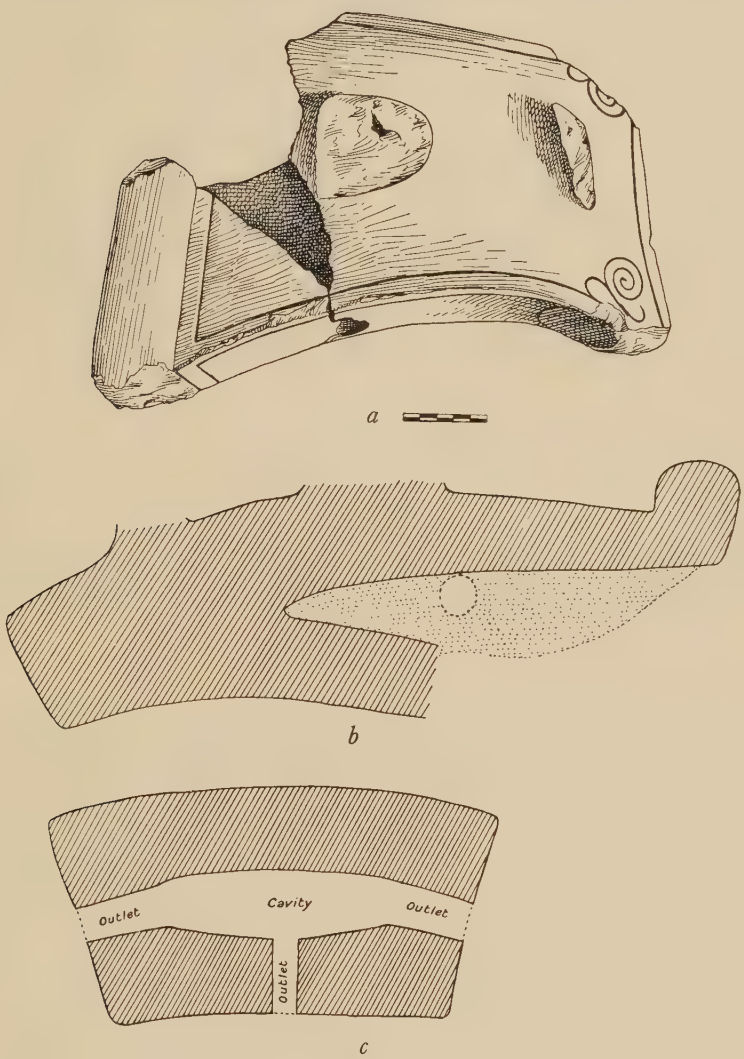


Fig. 10.—Terracotta Object.
(Scale of *b* and *c*, 1 : 3.)

has almost the consistency of mud brick, not only causes breakage but also frequently spoils the surface.

Besides heads and other fragments of women and children of the usual Hellenistic types, there are a number of more interesting pieces.

In fact the deposit has a character of its own. Animals are unexpectedly common, including deer, dog, sheep, horse and pig (pl. 25, no. 10). Several fragments represent the bare knees of seated figures, or bare legs, and these appear to belong to naked women, who are represented both sitting and standing (unfortunately headless). They may afford a clue to the cult which produced the deposit, though another figure is still more significant. It is that of a woman with archaic hair which falls down her back in a square mass crossed by horizontal lines. The style of the dress, on the other hand, though details are indistinguishable, cannot be earlier than the end of the fifth century and may be much later. Head and feet are lost. There is also a fragment of an archaistic male figure with a curl over each shoulder, imitating, apparently, an early fifth-century type. Two more pieces deserve mention: the body of a doll with holes for attachment of arms, and a fine comic masque 6·6 cm. high.

Lamps.

One whole lamp was found in the fill. It is of the type illustrated in *A.M.* 1929, p. 52, fig. 44, no. 1, and attributed by Technau to the seventh and sixth centuries. Another lamp and several fragments from the fill belong to the fourth–third century type illustrated *op. cit.* p. 54, fig. 46, no. 3. They may have been imported from Samos.

Metal.

A. *From the Early Apsidal Building.* Three fibulae, one of which is too fragmentary to be attributed to any type, while the other two belong to Blinkenberg's types IV 3 and IV 10.[1]

B. *From the Later Apsidal Building.* One fragmentary fibula (stratified); a bronze handle, like *Olympia* IV no. 664, an iron spear-head, leaf-shaped with hollow shaft, and two fibulae of Blinkenberg's type XII 5, all from the fill.

C. *From above the paving.* An iron spear-head similar to the last but with central rib and longer shaft.

D. *From the fill in the north-east corner of AC behind wall IX.* An arrow-head of the triangular type with hollow shaft.

E. *From the 'hard earth' or Hellenistic stratum.* One arrow-head similar to last, a small bronze chizel, and fibulae of Blinkenberg's types XII 13, XII 14 (variant), IV 3, and XIII 1.

Many bronze coins were discovered, most of which will scarcely repay the cleaning to which they are being subjected. Those which are in

[1] Blinkenberg, *Fibules Grecques et Orientales.*

better condition are of the common type, with a female head on the obverse, and on the reverse either an archaistic bearded head or a lyre. See *B.M. Cat. Lesbos*, p. 175. They are dated between 300 and 167 B.C., when the town was destroyed by the Romans.

Bone.

In the early apsidal building was found the bone object illustrated in fig. 11. It is 13 cm. long, decorated on one side with incised circles.

Fig. 11.—Decorated Bone Object.
(Scale 2 : 3).

Another example was found on the dump. Compare finds from the Orthia site.[1]

Stone.

Two legs of a large stone bowl were found in the fill (pl. 25, no. 11) and the spout of another. The material is local.

The Tombs.

These covered not only the hill immediately south of the Acropolis (Koldewey, *Antike Baureste*, pl. 6) but also its extension eastwards. Here the coast-line bends south, forming a small bay; the hill is crossed by a footpath going to the village of Skalochorion; and the ridge is crowned by a *mandra* or sheepfold. Below the *mandra*, several graves were found by peasants planting tobacco. The contents, confiscated by the Government, were generously put at our disposal for publication by the Ephor of Antiquities.

The tomb groups, completely confused by the finders, consisted of vases, a terracotta, a glass amphoriskos, and some fibulae. The vases include the Protocorinthian skyphos, pl. 24, no. 1; a Protocorinthian ovoid aryballos (decoration lost); bucchero cups, bowls, skyphos, jar and phiale, pls. 21, nos. 1, 3, 5, 7, 11; one Rhodian bird-bowl (decoration lost); and several coarse red vases, of which two appear in fig. 12.[2]

[1] Dawkins, *Artemis Orthia*, pl. clxv.

[2] The bowl seems local. The amphora, one of a pair, is shaped like the Rhodian examples (e.g. *Clara Rhodos*, IV, p. 162, fig. 161) and may be imported or copied. The date is first half fifth century.

The terracotta represents a seated woman holding a dove (pl. 25, no. 9). She wears a type of cap which seems to have been fashionable in Lesbos and the towns on the coast opposite. Besides the other examples from Antissa

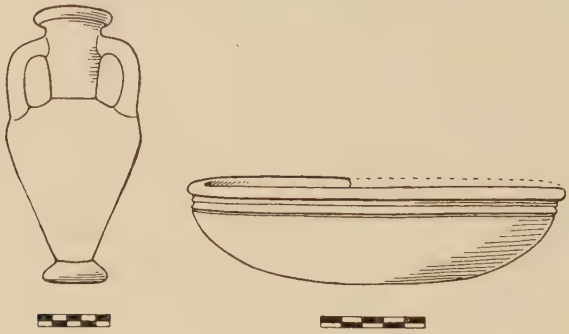


Fig. 12.—Coarse Red Ware

(pl. 25) it occurs in statuettes found by Mr. Paraskevaïdes at Kallone, while Winter illustrates one from Lesbos and several from Assos and the Troad.[1] Our figure belongs to the early fifth century. The glass amphor-

1 2 3

Fig. 13.—Glass Vases.

iskos, banded with dark blue, light blue and yellow, appears in fig. 13. The fibulae are of Blinkenberg's East-Greek type No. XII, 4 and 5, attributed to the geometric and early archaic periods.[2]

[1] Winter, *Terracotten*, III, 1, p. xlv, pl. 54. [2] See *B.S.A.* xxxi, p. 174.

Our own tests in the same area shewed that our predecessors had found everything worth finding. Only two fragmentary sarcophagi remained, and they do not merit description. The better of the two contained a bucchero bowl, a coarse red lekythos, and a Corinthian round aryballos.[1]

We also made tests over the hillside from the *mandra* to the slope south of the acropolis.[2] A number of tombs were found, usually under or between outcropping rocks, and often tucked into surprisingly small hollows. These snug resting-places have one great disadvantage; they collect moisture to such an extent that few bones remain, and the surface of vases and terracottas disappears. The finds were, therefore, disappointing.

Fig. 14.—Clay Coffin.

Fig. 15.—Burial Jars.

The bodies were buried in coffins or jars. One coffin was of stone, the rest of clay, but it will be remembered that stone coffins or cist graves were found in 1932. The clay coffins were sometimes plain, but more often of the shape associated with Clazomenae sarcophagi (fig. 14), which here survived from the sixth till after the fourth century, and which was also found at Methymna in 1927 and in Chios (Δελτ. 1915, p. 70). Several types of lid were used, but none has been completely preserved. The two best are shewn in cross-section in fig. 16; type B, the commonest, may have various mouldings at the edge. There are also remains of a cover with angles like a box lid, and of another curved like a drain-pipe. The orientation of the graves varies.

[1] Decoration corroded.

[2] The comprehensive notes of Miss Six and Mr. Cook, who supervised the digging of many of the tombs, have been most useful in compiling this report.

The burial jars were all, so far as we could judge, amphorae (fig. 15). No bones were found in any of them, but one example this year and one last year contained small quantities of ash. Most of the amphorae were found broken, the most fragmentary having been crushed by a large piece of sarcophagus which had been placed in ancient times to protect it.

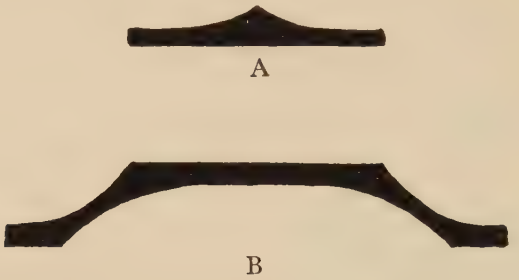


Fig. 16.—Lids of Sarcophagi.
(Scale 1 : 10.)

Contents.

The *vases* consist of the following:—(1) Protocorinthian skyphoi; (2) Attic lekythoi, of which the decoration if preserved consists of palmettes or ivy leaves (first half fifth century); (3) Attic squat lekythoi, one plain, belonging to the first half of the fifth century, one ribbed, belonging to the late fifth or early fourth; (4) an elongated piriform aryballos of local coarse red ware; a fragmentary bucchero cup; (5) the fragment of a plastic vase, with black spots, on buff clay, possibly a Corinthian hedgehog.

The two *glass* jugs appear in fig. 12, nos. 2 and 3.[1] No. 2 is of white and purple glass. It comes from XH, a clay coffin of the Clazomenae type. There were signs that the head lay at the east end with the jug at one side, an Attic black-figure lekythos (decoration lost) at the other, and small fragments of bucchero cup lower down. No. 3 comes from a decayed sarcophagus, WA together with the bird and rider nos. 7 and 8 on pl. 25, the local red vase and plain squat fifth-century lekythos mentioned above, and over seven broken lekythoi all belonging to the first half of the fifth century.

Metal. Remains of an iron dagger, and two pointed bronze implements which I cannot identify.

Bone. The fragmentary spectacle fibula, fig. 17, was found last year outside the tomb group VD.

Terracottas. A comic actor, wearing a mask, came from the same sarcophagus as the fragment of a Corinthian plastic vase. The actor

[1] For jugs and amphoriskos, cf. *Clara Rhodos* III, p. 213, fig. 210.

appears to belong to the Hellenistic period. The other terracottas were, however, earlier: see pl. 25, nos. 1–8. The finding of nos. 7 and 8 in WA has been described already: they seem to belong to the late sixth and early fifth centuries. Nos. 1–6 are from XC, a small plain sarcophagus, only ·89 m. long and ·34 m. wide inside. With them were four Attic lekythoi (late black figure?) and a burnt Corinthian skyphos. Vases and terracottas are all terribly corroded.

Fig. 17.
(Scale 2 : 3).

The terracottas 1 and 4 are earlier versions of the type represented by and discussed in connection with no. 9. No. 3 was once a pinax like one found in Rhodes, with a little man seated full face on a couch, knees spread, ankles together.[1] No. 5 seems to be wearing a long garment which reaches to the feet, a cloak with the two ends falling to the knees in front, and the remains of some kind of hat. There are curls over each shoulder in front, and the left hand is raised to touch them. No. 6 is a woman riding on a saddle like that the modern peasant uses, and no. 2, the crouching boy in the conical cap, has, like no. 3, a counterpart in Rhodes.[2] We would enjoy the local peculiarities of style and subject better if we could see the details.

W. Lamb.

[1] *Clara Rhodos* IV, pp. 208–10, a close parallel.
[2] *Ibid.*, p. 143, fig. 137 and p. 148, fig. 144.

RESEARCHES AT ISTHMIA

(Plate 26)

The following article embodies the results of researches made by the writer at the supposed site of the Sanctuary of Poseidon at the Isthmus and of the Isthmian games.[1] Two short campaigns of excavation upon a very small scale were made in 1932 and 1933, in the course of which many areas were tested. Mr. H. Megaw has rendered invaluable assistance by making a revised and accurate plan of Justinian's fort (the so-called temenos) and a new plan of the district which includes all the areas in which trials were made;[2] the section dealing with the fortifications (pp. 69–79) is also his work. The writer's thanks are also due to Mr. E. J. A. Kenny, who assisted in the preparation of the western section of the large plan; fig. 9 is based on a large-scale plan also by him. A short notice of the operations undertaken in 1932 appeared in *J.H.S.* 52, 244, but at least one suggestion made in it has now to be abandoned in the light of the fresh evidence secured in 1933.

The work of previous researchers in the Isthmian area will be touched on as occasion arises; it is to be noted, however, that one most important piece of literary evidence has strangely been passed over by all previous writers. Xenophon (*Hellenica* IV. v. 4) states that the troops which Agesilaus posted on the spur of Geraneia (overlooking the modern Loutraki) preparatory to his assault on Peiraion, in Perachora, saw the flames of the temple of Poseidon which was that night set fire to by unknown hands: this Posidoneum, from the way in which it is mentioned, can only be the temple of Isthmian Poseidon, whose site is visible from the spur in question, as the writer knows from personal experience. This means that the 'not very large' temple seen by Pausanias[3] could in no circumstances have been older than the first half of the fourth century: and that the small building represented on the coin of Geta[4] gives no clue either to

[1] The following abbreviations have been employed: Monceaux: *Gazette Archéologique*, 1884, pp. 273 ff.; Fowler: *Corinth, I: Introduction, Topography, Architecture*, pp. 59–71.

[2] Fig. 7 and Pl. 26. Monceaux's plan of the area (reproduced most recently in *Guide Bleu* 1932) is incorrectly scaled; confusion is worse confounded by the American draughtsman (*Corinth* I p. 61) who reproduces Monceaux's plan, but decuples the scale register; *e.g.* Monceaux's plan gives the distance from Stadium to Theatre as about 40 m.: ergo, the American version gives 400 m.: hence (?) Fowler, 'about a quarter of a mile.' The actual distance is about a furlong.

Note that where places are indicated by letter and number, the references are to Plate 26.

[3] II, i. 7.

[4] Frazer, *Pausanias*, III, ii.

the scheme or size of the archaic temple, which may have been, and probably was, a good deal larger.

Excavation took place in four main areas: they are marked (working from east to west) as A, B, C, and D, on the folding plan (pl. 26). We shall deal with them in that order.

Section A, the walled area, which from earliest times has been regarded as the site of the temenos of Poseidon almost entirely on account of its imposing circuit of walls, abuts on the great trans-Isthmian wall; before the excavations within its area are described, some remarks are called for in regard to the walls themselves.

R. J. H. Jenkins.

On the Date of the Fortifications.

Of the successive fortifications at the Isthmus of Corinth mentioned by the historians, that of Justinian was the most considerable. The main wall was supported by a series of fortresses (Φρούρια) [1] and was provided with one hundred and fifty-three bastions or towers (Φυλακτήρια).[2] Earlier Isthmian defences are known to have been constructed in impermanent materials,[3] while those later were merely repairs to Justinian's wall.[4] The fortified enclosure on the rising ground to the west of the modern village of Isthmia and the walls which continue its northern rampart in both directions, east and west, are the only surviving defence works at this point; there is, therefore, prima facie, good reason for identifying these as a part of Justinian's scheme; the latter as his trans-Isthmian wall, the former as one of its reinforcing Φρούρια.

Previous investigators of the site have reached very various conclusions as to the date of the fortifications in question. O'Neill [5] argues in daring contradiction of Herodotus that the cross wall of 480 B.C. was constructed in regular masonry and identifies the existing wall with it. That of the enclosure, which he regards as the Isthmian sanctuary, was, he supposes, 'used in constructing the line of defence.' He thus suggests that the former is even earlier in date. Others, while still regarding the wall as Hellenic work, accept the statements of Herodotus and Diodorus and are forced to regard it as subsequent to the campaign of Epameinondas.[6] Monceaux [7]

[1] Procopius, *De Aed.* (ed. Bonn), p. 273.

[2] Procopius does not mention the number of φυλακτήρια, but Phrantzes in connection with Manuel Palaeologus's repairs states it as 153 (ed. Bonn, p. 108). Fowler (p. 55), with reason, assumes that they were originally the work of Justinian.

[3] *E.g.* those of 480 B.C. (Herodotus, VII, 71) and 369 B.C. (Diod. XV, 68)

[4] *E.g.* that of Manuel Palaeologus in 1415 (Phrantzes, p. 96).

[5] *Ancient Corinth*, I, pp. 13 ff.

[6] Leake, *Travels in the Morea*, III, pp. 302 ff.; Curtius, *Peloponnesos*, I, p. 14; II, p. 547; Frazer on Pausanias, II, 1. 5.

[7] Pp. 275 ff.

believes that the present remains are all of Roman date and not later than the first century of our era, but also that they preserve the disposition of an earlier Greek sanctuary wall. Fimmen alone ventures the opinion that the so-called sacred precinct is a fortress and the work of Justinian.[1] Fowler, the latest writer on the subject, ignoring this suggestion, prefers a date 'during the period of Corinthian independence, certainly before the city was destroyed by the Romans,' for the cross-wall,[2] while on the date of the 'precinct' wall he is consistently vague.[3]

From the examination of the scant historical evidence these considerations emerge to support Fimmen's view. According to Procopius, when

Fig. 1.—The Enclosure Wall between Bastions 5 and 6, showing Facing Blocks and (top right) Rubble Core.

Justinian built his wall the earlier fortifications had collapsed[4] and it is therefore unlikely that any of these should remain to-day in such a fair state of preservation as the existing wall. Again, if the elaborate fortification in question is Greek or Roman work, is it not surprising that it is not mentioned by any classical author, in view of the fact that there are contemporary references to other fortifications of a less durable character? Finally, those who favour a date in the classical period necessarily imply that Justinian's work must be looked for elsewhere; nevertheless, they have not found it. Yet it is impossible that a fortification on the monumental scale indicated by Procopius and Phrantzes should have entirely disappeared.

[1] *R.E. s.v.* Isthmos. [2] P. 54. [3] 'What remains is ancient' (p. 62).

[4] *De Aed.* 273, τὸν ἰσθμὸν ὅλον ἐν τῷ ἀσφαλεῖ ἐτειχίσατο, ἐπεὶ αὐτοῦ τὰ πολλὰ κατεπεπτώκει ἤδη.

Of whatever date, the surviving remains are of one period. A single structure is found throughout: a double wall of large limestone blocks with a rubble filling (fig. 1 and fig. 4 below). The facing blocks are set in mortar [1] which corresponds to that used to bind the rubble core. They are for the most part carefully squared and on the exposed face have been worked to a fair finish with a tooth-edged chisel. In general, the long sides are parallel to the direction of the wall, but at intervals the facing is bound to the core by header blocks. The proportion is seldom less than three stretchers to one header. This feature is best seen between bastions 14 and 15, where in the single exposed course of the interior face the stretchers have fallen, leaving the headers prominently exposed. The facing blocks include many with channels and mouldings which have evidently been taken from various buildings of the classical period. Frequent are fragments of column drums with twenty [2] flutes from a Doric building of considerable size. This re-used material is found not only at various points in the wall of the enclosure, but also in the main Peloponnesian wall at a considerable distance from it.

The rubble filling was carefully examined at several points. It was found to contain roof-tiles of various dates and several pieces of painted terracotta revetment. These, like the re-used blocks, are distributed throughout the whole fortification, so far as it was examined, and are not confined to any one part of it. A piece of painted roof-tile probably of fourth-century date was noted between the Roman building west of the 'precinct' and the Kyras Vryse stream (E 1). Most significant is an Ionic column drum which is still to be seen embedded in the filling a few paces to the east of the N.E. gate. The temple to which this and other similar fragments belonged is generally supposed to have been that of Palaemon, which Pausanias saw. The building of the wall must therefore have been subsequent to his visit and its destruction. In the filling of the wall no dateable sherds were found.

North-East Gate (Fig. 2).

The unity of this walling is broken only once—at the North-East gateway (K 1), whose core is a Roman triumphal arch. The lower part of four piers, approximately square, which carried a large central and two smaller lateral arches, remain, and these alone are Roman. The walls which extend internally from the central pair and are rabbeted to receive the wings of a later door, are themselves plainly a subsequent addition.[3] Their

[1] Monceaux's statement that they are bedded without mortar (p. 275), copied by Fowler (p. 62), is certainly false.

[2] Not sixteen as stated by Monceaux (p. 359), Schneider (*R.E.* IX, 2260, Isthmia) and Fowler (p. 67).

[3] This has not been indicated on previously published plans. Monceaux, figs. 1 and 2; Fowler, figs. 30 and 32.

masonry breaks jointing with that of the piers and in part at least conceals the pilasters which adorned the interior face of the Roman arch.[1] Monceaux dated the arch in early imperial times and regarded the whole fortification wall as contemporary with it, 'car il a la même largeur et appartient au même système de construction que les piliers de la grande porte triomphale.'[2] Neither of these observations is correct and the argument is therefore invalidated. The depth of the piers is 2·45 m., while the width of the wall immediately to the west of the arch is 3 m.,

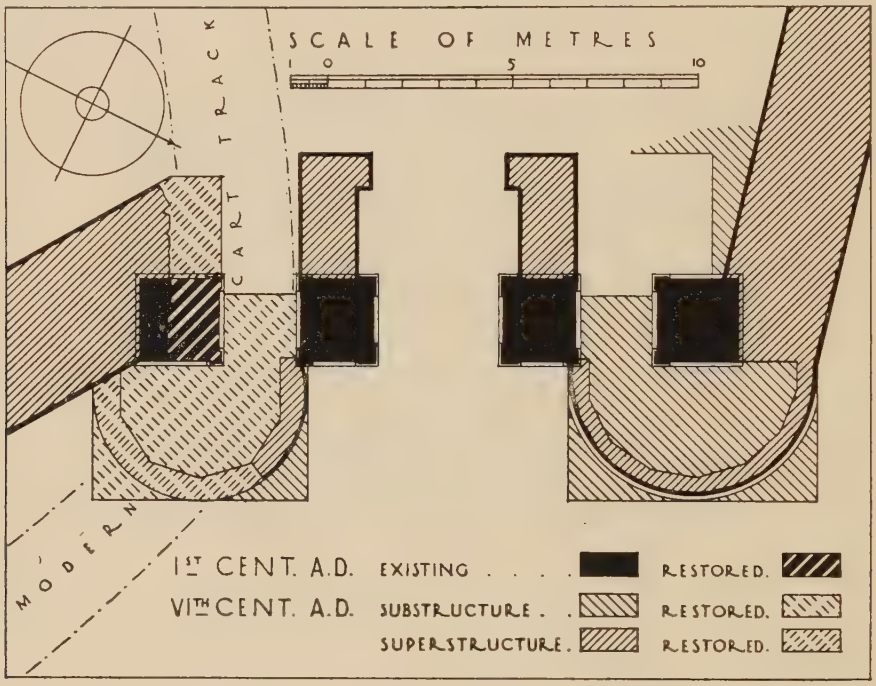


Fig. 2.—The North-East Gate. Plan showing Relation of Byzantine to Roman Work. (Scale 1 : 200.)

and to the east 3·90 m. The arch is built in smoothly finished ashlar without visible tool-marks, bedded without mortar and without a rubble core. The enclosure wall which abuts directly on the outer face of the lateral

Well illustrated in Fowler, fig. 31.

[2] P. 275. His dating of the arch is not questioned. In the west its general disposition is paralleled in the arch at Fano (A.D. 9–10) and, more exactly, in the Porte de Mars at Reims (1st century A.D.), while its pilaster decoration recalls that of the Porte du Marché at Langres. These arches have been most recently discussed and illustrated by Richmond, *Commemorative Arches and City Gates of the Augustan Age* (*J.R.S.* XXIII, pp. 149 ff.).

piers is as described above (p. 71). Arch and wall are therefore of different dates and a glance at the plan will suffice to shew that the latter is the later. It will be noted that the main wall leaves its natural line evidently to include the archway in its circuit; without a pre-existing arch it is difficult to account for this irregularity of plan. Further, an examination of the junction indicated a later date for the wall. The absence of bond, the obtuse meeting and the masking of it, together with the lateral openings of the arch by massive towers, leave little room for doubt. Others have admitted that the towers, rather more than semicircular in plan and standing on rectangular bases, are Byzantine work; that they are contemporary with the wall itself one recognises as soon as one sees on them the characteristic marks of the tooth-edged chisel.

South Gate.

The South gate (H 3, 4) opens through a stretch of wall which is thicker than the rest of the enclosure—3·70 m. as compared with 2·25 m.

Fig. 3.—Cross Cut on Facing, to left of South Gate.

This is possibly to be accounted for by the abutment of internal buildings at this point; a complex of chambers, one of which is circular, can be traced on the surface between the gate and bastion 10. The construction is the same as elsewhere, the same size of facing block is used, the difference in dimension is in the filling. The gate is flanked by two towers (nos. 8 and 9), both octagonal externally. The interior plan of 9 repeats this form, that of 8 is a circle of rather smaller diameter.

On the outer face of the gateway are cut two crosses, one on either side (fig. 3). In each case the face of the cross is considerably in advance

of the stone from which it is cut, and this is flush with the general surface of the wall; the cutting of the crosses must therefore have been contemporary with the building of the wall. Those who regard the wall as Greek or Roman in the main are forced to conclude that the stretches of wall on either side of the gate are later Byzantine casings.[1] This seems unlikely, since the total thickness of the wall at this point exactly equals that beyond bastion 9, since the front face of the gate which bears the crosses is in alignment with the curtain between bastions 9 and 10, since the surface of the cross-ornamented stones was finished with the same tool as was used throughout the fortification and, finally, since there is no trace of an earlier wall behind.[2]

'The polygonal tower of good work which may be attributed to the Hellenic period'[3] can only be bastion 9. It is, in fact, contemporary with the rest of the walling; for its external octagon in dimension corresponds exactly to that of bastion 8 for which no one has specifically claimed a Greek date, it has the usual double facing with a rubble core and is finished with the tooth-edged chisel.

West Gate.

A little to the north of bastion 14 the wall of the enclosure has been deliberately breached (fig. 4). Monceaux[4] supposed this opening to be a third entrance gateway, and Fowler[5] accepts this identification. It can, however, never have been an entrance of any importance. The meagre width contrasts with the 3·70 m. of the South gate. Again, on either flank the rubble core is exposed, and the facing would hardly have been omitted had it been a regular gateway. Though the adjacent bastion might be mistaken for one of a pair of flanking towers, there is no trace of another.[6] The pavement which Monceaux claims to have found here at a depth of 2·50 m. probably belongs to the Roman stratum. Of the so-called vaulted passages or lateral entrances, that to the south evidently gave access to bastion 14. The other, at an unequal distance to the north (7·90 m. centre to centre), is a breach similar to the principal one without either arch or facing.

A cursory examination of the fortification left the present investigators quite unable to accept the latest dictum upon it, that 'what remains is

[1] Fowler, p. 63.

[2] The west flank of the gate has a superficial resemblance to Greek work which perhaps explains its being mistaken for such (Monceaux, p. 279 and Fowler, p. 63). By exposure to the weather the mortar has been washed from the joints, as in other parts of the enclosure, but it remains undisturbed on the interior return of the wall; though the surface is much worn, on one stone at least the characteristic tool-marks are clearly visible.

[3] Fowler, p. 63; Monceaux, p. 279. [4] P. 276. [5] P. 62.

[6] The position of this bastion 14 is one of several errors on Monceaux's plan which Fowler has not corrected.

ancient,' [1] but rather confirmed them in the contrary view that everything above ground with the exception of the Roman arch is of post-Roman date. It remained to be seen if any part of the wall now hidden by the fallen débris of its upper courses could have belonged to some earlier fortification. In 1932 a trench was dug against the wall of the enclosure between bastions 10 and 11 from the outside. The present top of the wall is 1 metre above the general ground level (zero) and the débris reaches to this height. Two walls of a Byzantine house were uncovered, the floor level of which was at – 0·85 m. Of the main wall only three courses are

Fig. 4.—Breach in Enclosure Wall by Bastion 14.

preserved. The lowest rests directly on virgin soil at a depth of – 0·95 m.: it maintains those characteristics which were noted in the exposed courses elsewhere. In the trench even at the lowest level only Byzantine and late Roman sherds were found. The builders of the wall evidently cut through a Roman stratum to set their foundation on virgin soil. This small excavation left little room for doubt that the whole fortification, from the foundations, is of post-Roman date, thus supporting, but not proving, the identification with Justinian's system of Isthmian defences.

Among other fortifications in Greece dated in the sixth century the

[1] Fowler, p. 62.

fortified enclosure of the monastery at Daphni is one of the best preserved.[1] In plan its projecting bastions, and in structure its rubble core faced with large blocks of conglomerate,[2] reproduce exactly the details of the Isthmian enclosure. Another fortification, at Thermopylae, is recorded as the work of Justinian,[3] and was a part of the same program of imperial re-fortification to which the Isthmian defences belong. It is unfortunate for the present purpose that this cross-wall at Thermopylae (though evidently well preserved) has been neither mapped nor systematically studied. Indeed in only one area—the then Byzantine province of Africa—have the monuments of Justinian's stupendous scheme received the attention they deserve. Professor Diehl, in discussing the military reorganisation of the province,[4] has published photographs and plans of the best preserved of the fortresses erected under Justinian. An examination of these forts reveals parallels both in structure and detail with the Isthmian fortification, so many and so close that the question of its date is settled once and for all. The general disposition is identical, an enclosing wall usually rectangular but taking advantage of any sloping ground; square bastions similar in size and at approximately similar distances (Isthmia, 30 m.–65 m.; Africa, 40 m.–70 m.) and one or, more usually, two entrance gates (seldom more), the principal ones flanked by twin towers. The construction is identical—two facings of large blocks bonded to a rubble filling by occasional headers,[5] and even the thickness of the curtain is the same (Isthmia, 2·30 m.; Africa,[6] 2·30–2·70 m.). In each case most of the bastions are rectangular in outline, and in spite of their greater height are built with thinner walls (Isthmia, 1·65 m.; Africa,[7] 1·25–1·80 m.). There is, in fact, no detail found at Isthmia which is not paralleled in one or other of the African fortresses. Of circular towers built on a square base there are examples at Medinet Kedima (Thelepte),[8] while twin octagonal towers flanking a gate are found in nos. 15 and 16 at Aïn-el-Bordj (Tigisis).[9]

The proper designation of the Isthmian enclosure as a fortress dating from the reign of Justinian is finally established by these African parallels. Its completion was marked by an inscription bearing that emperor's name which was seen at the time of Manuel Palaeologus's repairs.[10] This inscription (*I.G.* iv. 204) was rediscovered by Monceaux while excavating the South gate, above which it was doubtless formerly set.

[1] Millet, *Le Monastère de Daphni*, pl. II, whence Wulff, *Altchr. u. Byz. Kunst*, II, fig. 393.
[2] Millet, *op. cit.* p. 5 and pl. I; this system is confined to the lower courses.
[3] Procopius, *De Aed.* p. 271.
[4] *L'Afrique Byzantine*, part II.
[5] *Ibid.* p. 148 and figs. I and II.
[6] *Ibid.* p. 148.
[7] *Ibid.* p. 154.
[8] *Ibid.* figs. 29 and 30.
[9] *Ibid.* fig. 50.
[10] Phrantzes, p. 108; Paschalis, II, p. 254

The Trans-Isthmian Wall.

The wall, which extends across the Isthmus, being thicker than that of the fort, was of greater height, and is more obscured by the larger quantity of débris which has fallen. To the east of the fort, however, bastions are clearly visible and at various points its facing and rubble structure can be seen. One might therefore safely conclude that it was contemporary with Justinian's fort, but it was considered advisable to check this by excavation.

A trench was dug against the wall from the outside at a point 150 m. west of the fort (G 1).[1] Of the main wall, which is at this point 2·75 m. thick, three courses were uncovered. The lowest of these rested at a depth of 2·20 m. on a blockage foundation of stone, tile and mortar similar to the filling of the upper courses. A part of this foundation was originally exposed, for the former ground level was found at 2·50 m.; its total depth is more than 1·10 m.; its width is equal to that of the wall above, with which it is certainly contemporary. Most important was the evidence discovered here indicating an elaborate system of outworks (fig. 5). First at a distance of 6·90 m. the lowest course of a secondary wall ·70 m. thick appeared, resting on a shallow blockage foundation. Pits were sunk on either side of the trench and the direction of this wall established as exactly parallel to the main wall. Beyond this was a deep ditch rising steeply on the outside.

Procopius's descriptions of the forts erected by Justinian include in some cases details of the outworks. From these and passages in the anonymous treatise Περὶ Στρατηγικῆς, which is contemporary,[2] Professor Diehl has deduced the general principles of Byzantine fortification. I need only summarise the relevant passage.[3] In front of the wall (τεῖχος) and at a distance equal to one-fourth of its height is raised a secondary one (προτείχισμα). It was between these two walls that the inhabitants of the locality assembled to assist in the defence. Beyond the outer wall was a ditch (τάφρος), wide and deep, with steep sides; the soil from its digging was thrown on the outside, forming the third and outermost rampart (ἀντιτείχισμα).

The section through the Isthmian outworks (fig. 5) speaks for itself. The stones loosely heaped on the brink of the ditch constitute the only curious feature; they may have been used to steepen the declivity of the ditch on that side, but more probably are the débris of the upper courses of the προτείχισμα, which apparently did not fall until the ditch was partially filled. This trench has proved doubly interesting—first, because it

[1] Beyond this point the wall was not accurately measured; it has therefore been represented on the plan by an open line.

[2] Krumbacher, *Gesch. d. Byz. Litteratur*, p. 635.

[3] *Op. cit.* pp. 145 ff.

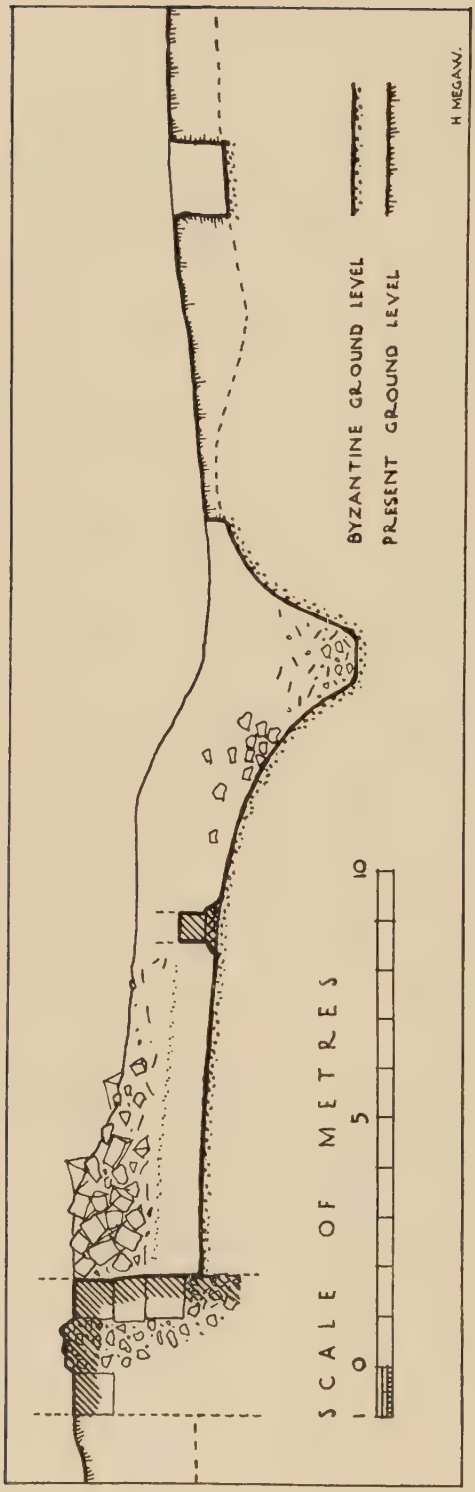


FIG. 5.—SECTION THROUGH TRANS-ISTHMIAN WALL SHOWING OUTWORKS.

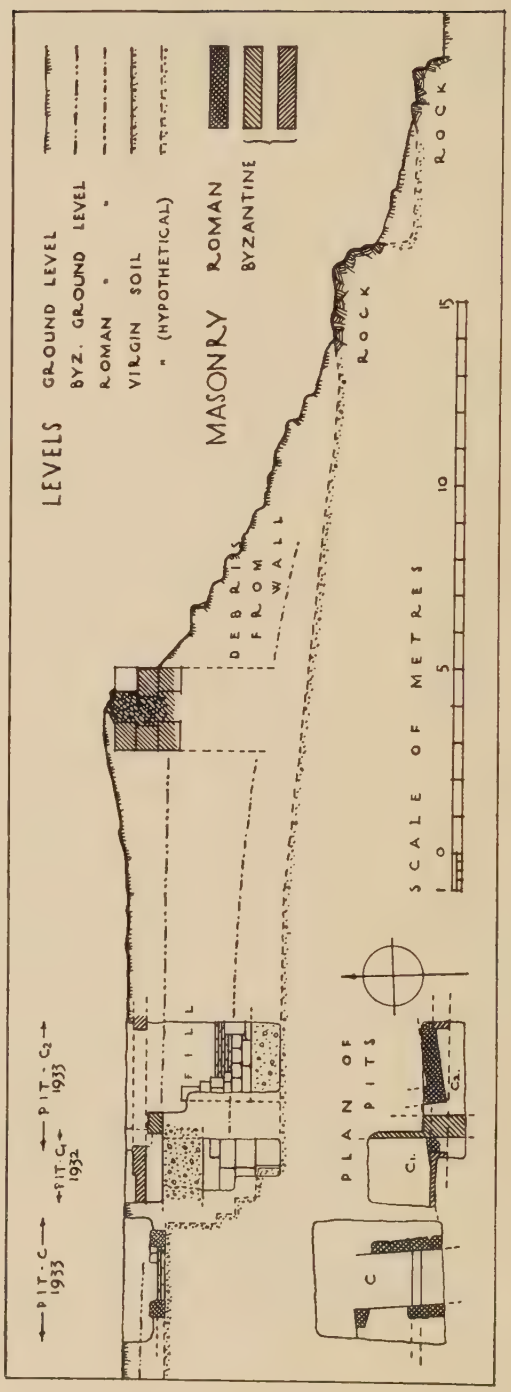


FIG. 6.—SECTION THROUGH C PITS AND ENCLOSURE WALL.

establishes that the trans-Isthmian wall like the fort itself is the work of Justinian and, secondly, in that the principles of Byzantine fortification in the sixth century, as known from a few scattered passages in two contemporary texts, are here for the first time confirmed by excavation. Diehl notes that the African forts were hastily and simply built, for the outworks are reduced to a minimum or altogether omitted; [1] the προτείχισμα is nowhere found, the τάφρος only at Carthage.

H. Megaw.

Report on Excavation.

Section A.

In 1932 the pit marked C 1 on fig. 7 was sunk near bastion 5: virgin soil was reached at the considerable depth of 4·50 m.: a Byzantine house-foundation lay close below the surface; while deep down, resting on the virgin soil itself, lay a Roman foundation consisting of large limestone blocks. The soil between these two strata was very loose, and full of Roman tiles and sherds; five classical sherds were among them, which were of Corinthian fabric of the fifth century B.C.[2] The depth of virgin soil in this pit when compared with the statement of Stais [3] that the level in the ' temenos ' was uniformly 1·60 m.–2 m. below the surface, combined with the fact that neither Monceaux nor Stais had indicated accurately by a plan or otherwise precisely where they had dug, seemed to call for a re-examination of the ' temenos,' which was carried out in 1933. Nine pits were dug: their positions are plotted in fig. 7. In pits A, B, C, E, F, G, H, the statement of Stais as to the depth of virgin soil was found accurate; in pits A, B, C, and E, Roman foundations were found, in connection with Roman pottery, resting on virgin soil. We had in pits A and B evidence (as in the previous pit C 1) of two strata and two strata only, a Roman and a Byzantine; though in these two places the Byzantine foundations (marked in the large-scale plan (fig. 7) as Buildings A and B) are actually above the surface. Pits G and H were dug as near as might be to the church of H. Joannes and its graveyard, as the French excavators decided that the Posidoneum must have lain beneath the foundations of the modern church: the results were negative. No foundation was discoverable in any pit which could possibly be attributed to a date before Christ, let alone to the classical period. Pit C was dug immediately behind (*i.e.* west of) pit C 1, to discover if the virgin soil continued as deep in that direction as in the latter: it was found not to do so, and the Roman founda-

[1] *Op. cit.* pp. 182 ff.

[2] It is probable that they all belonged to the same skyphos. These sherds led to the suggestion in *J.H.S.* lii, 244, that they might lie in the easternmost outskirt of a Greek level. This hypothesis, as we see below, was far from being substantiated.

[3] Πρακτ. 1903, p. 16.

tions on its virgin soil were at a depth of 1·20 m. only. It was now obvious that the ground immediately east of pit C, between it and the enclosure wall, originally sloped sharply downwards, and that the loose tile-filled

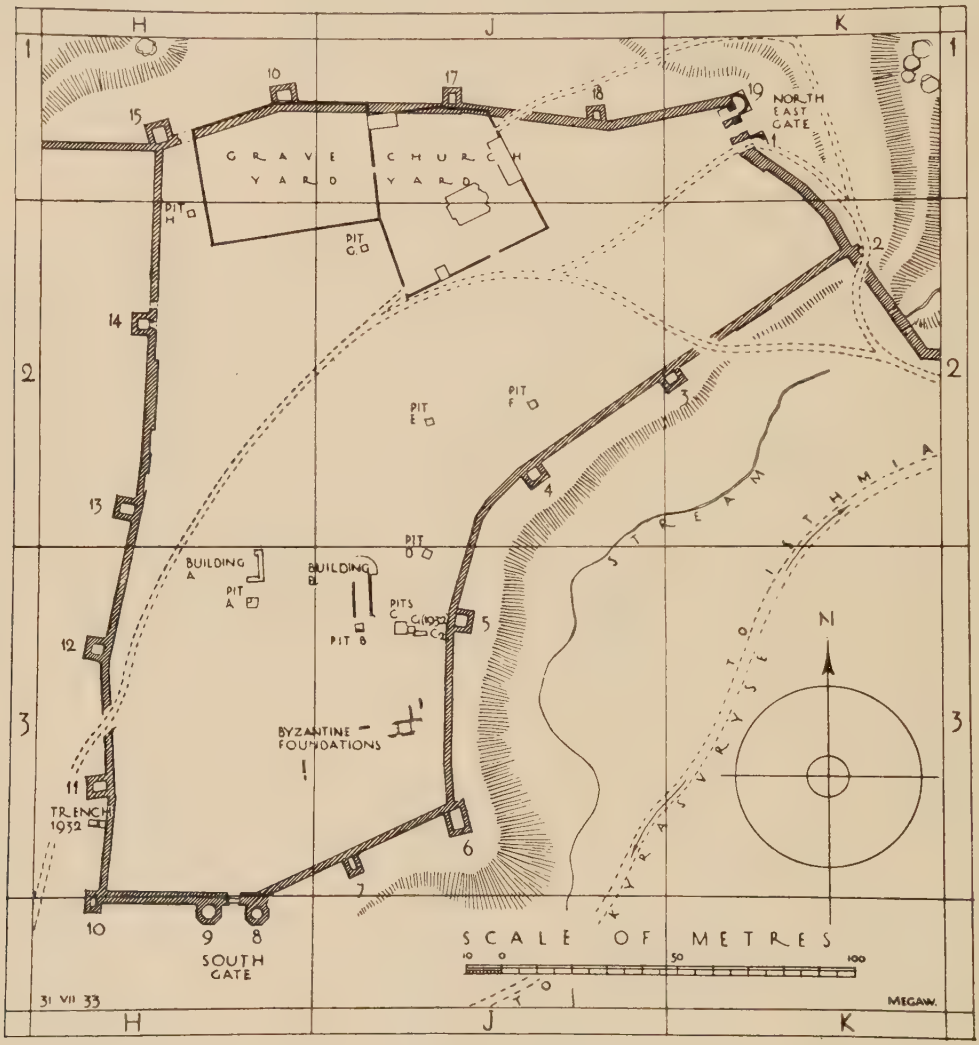


Fig. 7.—Plan of Section A.—Fort of Justinian.

soil between the Roman and Byzantine strata in last year's pit C 1 was the interior fill of the big 'temenos' wall, into which in the post-Roman period the Byzantines had swept all the débris of previous occupation, in order to construct a level surface for their own settlement. A further

examination of this ' fill ' was made the final test as to whether there could have been a Greek classical settlement in this area: it was just conceivable that all Greek remains might have been cleared from the western quarter of the ' temenos,' but had there been any, some must surely have been found in the débris hurled indiscriminately into the fill on the east. Pits C 2 (immediately east of pit C 1) and D were dug: pit C 2 gave, as was natural, the same evidence as C 1: [1] a Byzantine level was found just below the surface and, deeper down, resting again upon virgin soil, a Roman foundation, whose bottom was formed in this case by a layer of cement about a metre thick. The loose fill was even more closely packed with tiles and sherds than in C 1, and the many basketfuls of sherds provided valuable evidence for dating. Pit D further to the north was also well in the ' fill ' area, as was seen from the depth of virgin soil (3·80 m.) and the dark brown dusty soil filled with débris, which formed the bulk of the throw-out; sherds were equally numerous with those of C 2.

From the evidence provided by the pits C, C 1, C 2, the following conclusions may be drawn. The original (pre-Roman) slope of the ground eastward from pit C was not steep, but was modified during the Roman period, for the Roman building in pit C 1 was in all probability constructed on a foundation cut somewhat into the slope, as may be seen from the fact that the second course of its foundation is laid partly upon a step cut out of the virgin soil, and only its outermost block upon the single lowest-course block below it. The great depth of the foundations of the Roman buildings of pit C 1, C 2 in itself renders it highly unlikely that the ' temenos ' wall can have existed contemporaneously with them, and we know now from the previous section that it did not. In Roman times the settlement lay on the more or less gradual slope of an unfortified incline; the steep slope at present seen on the west side is entirely due to the Byzantine wall and its fallen débris.

A close examination of the pottery from all pits gave the following results. Of classical sherds, other than the five from C 1, were found seven, none earlier than the fifth century: none was found at a specifically low level. There were two Hellenistic sherds. The Roman pottery, which was found in great quantities not merely in the ' fill ' pits but also in C and E, comprised some sherds of late first century A.D. and some early third century A.D., but the vast bulk belonged to the second century A.D.,[2] and the settlement was obviously in its heyday at the time of Pausanias' visit. A fair quantity of deeply ribbed or ' combed ' ware was

[1] Fig. 6 should here be compared. It shows a section of C, C 1, and C 2 together with the ' temenos ' wall, and what was almost certainly the original ground level before the wall was constructed.

[2] This information I owe to Mr. Oscar Broneer, who very kindly went through some of the more significant Roman sherds with me.

found in connection with the upper or Byzantine stratum in pits C 1 and C 2, which, there is every reason to suppose, dates from the epoch of Justinian and the construction of the fort: this pottery, which is elsewhere common in the sixth century A.D., supports this view. The Roman portrait head in the accompanying figure 8 was found embedded in the foundations of the Byzantine house of pit C 1: it is of the third century A.D., and was utilised for a practical purpose by the Byzantines instead of being thrown into the fill.

FIG. 8.—ROMAN PORTRAIT HEAD, MID THIRD CENTURY A.D.

Conclusions. The complete absence of any Hellenic or Hellenistic remains, whether fortifications, house-foundations or (practically speaking) pottery,[1] forced the investigators, in defiance of previous tradition and hypothesis, to the view that no Greek sanctuary or settlement, whether Archaic, Classical, or Hellenistic, ever existed in area A, which must henceforth cease to be called the Temenos of Poseidon. It is impossible to suppose that all trace of such a settlement or sanctuary could have been swept away, particularly as the virgin level consists of conglomerate rock

[1] It is not maintained—as will be presently seen—that there was no classical settlement in the district, but that there was never one within the 'temenos' wall.

in one pit only, and in others of white cement-like soil, of which the dumps from the Corinth canal operations are seen also to be composed. The architectural fragments in the temenos wall may have been brought from any distance [1]—in fact the surrounding district must have been denuded of any stone which could conveniently be sawn into a block suitable for the construction of the vast trans-Isthmian fortification wall.[2]

Our evidence allows us to state the following conclusion: the earliest settlement in area A, which was at first an unfortified slope rising westwards from the sea, is contemporary with the imperial Roman arch (see above, p. 72) and dates from the first century A.D.: the place flourished in the second century but declined in the third.[3] In the sixth century Justinian built his trans-Isthmian wall, and looking for a site to build a strong fort to protect his wall's eastern extremity, pitched on this slope, which is the obvious point near the sea for such a defence: the wall would then be held at either end by Corinth and Isthmia.

Section B.

This area corresponds roughly to the southern half of Section G 3. Fimmen in his article referred to above, after dismissing the identification of section A with the temenos, suggested as the true site of the temenos a small plateau some 250 m. west of the walled area, adding that it was about where Monceaux's plan indicated 'débris de murs et de constructions.' But in fact Monceaux and Fimmen are indicating two quite different areas: it was decided to examine both: section B is the one distinguished by Monceaux. Foundations of three Roman houses were disengaged, all resting on virgin soil which was nowhere more than a metre below the surface; they are marked A, B, and C on the plan; the most northerly, A, was a large building, whose foundations were of large blocks interspersed with Roman and Greek tiles where occasion demanded: it opened on to what was probably a street to the south, down which ran a line of terracotta water-pipes.[4] In this house was found a broken marble fragment inscribed

[1] Monceaux (followed by Fowler) says that architectural fragments are visible on north, south, and west walls, but none on the east: in point of fact, more are to be seen in the east wall than anywhere else; most are sawn drums of a large Doric building: there is no evidence of its date or original position.

[2] The huge quarries whence the bulk of the material was cut are seen just east of Hexamilia.

[3] It was perhaps abandoned at the time of the Gothic invasion in the reign of Gallienus, A.D. 262.

[4] On the north side of A was found a subterranean channel cut in the hard clay but without any cement lining. It runs in a straight line from behind the Roman theatre (G 3) towards a point half-way between bastions 12 and 13 of the fort; the fall is from west to east. At A the bottom is at 5·00 m. below present ground level, 4·75 m. below virgin soil. The channel is 0·62 m. broad, 1·25 m. high and communicated with the surface by means of circular shafts at intervals of approximately 32 m.

in letters of Imperial Roman date - πολοιπα - - - εθηκε -. The other two houses to west and south were of poor construction, each being put together from any fragments discoverable, such as sawn fragments of rough unfluted columns. The pottery was uniform in all three houses, which no doubt formed a part of the Roman town whose traces were seen in area A.

Section C.

This is the area proposed by Fimmen as the site of the old sanctuary: it lies in the middle of the squares E, F 3–4, and comprises a small plateau some 90 m. wide immediately north of the easternmost houses of the modern village of Kyras Vryse. It is bounded on the north by a small wall (marked as bisecting section F 3), while in its south-west corner the outcropping rock has been cut to form a right angle and stepped to provide a bedding for blocks of a larger wall E 4.

Fimmen [1] observes of this area that 'eine grosse Terrasse künstlich hergerichtet ist'; he notes the rock cutting, and in the middle of the terrace remains of 'an old temple built of large limestone blocks.'

There is no doubt that this 'terrace' owes more to nature for its formation than to art: along its north edge, however, runs as we saw, a wall which served to enclose the area, and this wall, composed as it is of small-sized stones bedded in concrete, cannot be older than the Roman period. The 'Kalksteinquadern,' which Fimmen took to be 'Fundamentreste eines älteren Tempels,' lie at irregular intervals on the surface of the terrace. Cross trenches were dug in the hope of finding any foundation which could be associated with them, and the blocks themselves were examined. None of the blocks was found to rest on any sort of foundation: it is perhaps reasonable to suppose that they once formed part of the enclosure wall and were bedded in the cuttings already noticed in the south-west corner. The east–west trench disclosed at a depth of 0·33 m. fragments of an extensive marble paving, resting on a thick pebble foundation: Roman sherds (but no Byzantine) were frequent at this depth and immediately below it: virgin rock was at 0·90 m. The north–south trench went no deeper, but at its northern extremity was found a large foundation block resting immediately on the rock. Not a single classical sherd was found. Undoubtedly the 'terrace' was a place of importance, as its enclosing walls testify, and as its houses with marble paving shew: but we have no reason whatever to suppose that any structure existed there before the Roman period.

Fimmen's identification of the Graeco-Roman vaulted drain (now blocked up at the south end) with the underground adyton of Palaemon calls for no comment. The passage-way is immediately west of and below

[1] *Loc. cit.*

the terrace (E 3): it runs out into a small ravine cut to receive the water which ran ultimately into the deep valley outside the Peloponnese wall: the passage is described and correctly identified by Fowler.[1]

Section D (fig. 9).

The examined area lies in the squares B–C, 3–4; it was the only section which yielded evidence of an archaic and classical settlement. The area is cut from south to north by a wide and deep gully with its banks of white clay, down which flows the stream issuing from the Kyras Vryse spring; its surviving remains have only partially engaged the attention of previous

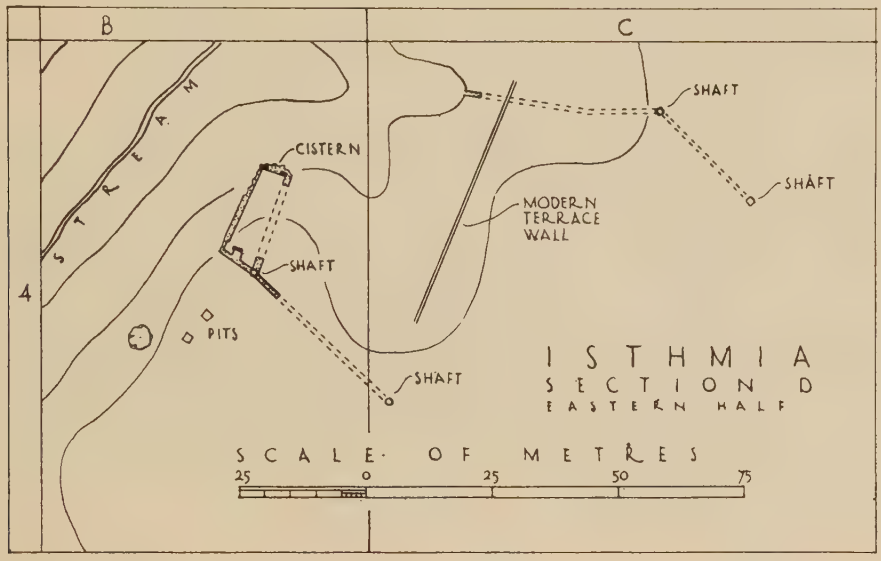


Fig. 9.—Part of Section D.

investigators, two of whom[2] identify the ravine with the ἱερὰ νάπη mentioned by Pausanias. Fowler describes a rock-cut channel or passage lying immediately beneath the modern village at the head of the ravine some little distance beyond the south-west corner of our plan: it corresponds in shape and dimension almost exactly with the one opened by us lower down in the clay wall of the ravine. There is no doubt that the ravine was considerably widened and probably deepened by earthquake at some date after to the classical period but before the construction of Justinian's wall: for the originally subterraneous water-channels of the classical era project in a broken condition from the sides of the ravine and can in one case be traced to their original point of termination some distance

[1] P. 70.

[2] Fimmen and Fowler.

out on the clay slope; while the wall of Justinian somewhat further north follows the present-day contour, descending into the ravine and mounting its opposite slope. The settlement suffered terribly from earthquake or earthquakes: much must have collapsed into the ravine itself and been washed away or buried beneath tons of clay; and the hopelessly confused jumble of objects lying in the earth which blocks the examined channel from floor to ceiling probably indicates the operation of such a cataclysm.

Attention was drawn to the area by the presence of sherds of classical date lying on the surface on both sides of the ravine: and in the eastern bank of the ravine, some eight or ten metres from the top (at a point in

Fig. 10.—Outlet of originally subterranean Water-channel of Classical Date, in E. Bank of Kyras Vryse Ravine.

the eastern half of B 4), could be made out a passage-way choked with earth, which led eastwards into the side of the ravine (fig. 10).

Pits were dug in the positions marked on each side of the ravine: occupational soil (a dark crumbly brown) was even shallower than in the other sections, turning at hardly more than half a metre to the white virgin clay.

The excavated water-channel was of greater interest (see fig. 11 *a*, *b*): it consisted of a passage-way more than 2 m. in height and about 0·80 m. wide, proceeding in an easterly direction some 30 m., as far as it could be traced. The whole interior surface was covered with excellently preserved cement, which, when compared with that of cisterns at Perachora, seems to indicate a date in the sixth or fifth century B.C. Two short passages at right angles ran off to the north close to the outlet: the outer of these is mostly destroyed by a fall in the bank of the ravine, but its dimensions

can be traced: it was from the point of its return that the excavation started. The inner subsidiary passage is preserved: both ran into a large cistern to the north, of which only two large blocks and a portion of a cement flooring are preserved. Above the point where the inner subsidiary channel branched off, a shaft had been let in through the roof from the surface. Both main and inner subsidiary channels were choked with earth which contained numerous fragments of pottery. Beyond this point of junction, however, the earth of the main channel fell away some half a metre from the roof, allowing us to penetrate, measure, and photograph the part that we were unable to excavate (fig. 11 *b*).

a

b

Fig. 11.—Excavated Water-system in Section D.

The evidence of the pottery collected from pits and from the cistern was as follows. Two geometric sherds were found; also sherds of proto-corinthian, Corinthian, Attic black-figure, and late Corinthian imitation of Attic; much of the pottery besides was of various coarse fabrics, but a comparison with coarse wares from Perachora which are known to be of the archaic period, indicates that some at least of the Isthmian sherds were of the same date. In the channel was also a late Corinthian votive figurine, which must be dated about 500 B.C. (fig. 12 *a*); and a fine fragment of a painted terracotta revetment from a raking cornice should probably be dated about 400 B.C. (fig. 12 *b*). Roman sherds were not wanting, but did not occur preponderantly. Unfortunately the water-channel did not

permit any stratification: the geometric sherds (which had come down through the shaft) were actually among those found at the highest level.

We should add that the settlement thus vouched for was of a considerable size, as is proved by the distance of the channel noted by Fowler to the south from our own; and even beyond the latter, to the north, other similar constructions are observable (B, C, 3).

The question now remains—is the settlement of section D the ancient settlement which contained the sanctuary of Poseidon? Arguments in favour of this view may be thus tabulated:

a *b*

Fig. 12.—*a.* Late Archaic Corinthian Terracotta Figurine; *b.* Fragment of Painted Terracotta Revetment from a Raking Cornice.

1. This area is the only one so far examined which gives evidence of an archaic and classical settlement: [1] all other areas have Roman and Byzantine remains only. This is the strongest argument. If this is not the original settlement, then it must be looked for even further west.

2. The fragment of raking cornice is evidence for an important building on the spot: the numerous flat painted tiles found in all sections were used as material in the construction of later buildings: this cornice fragment is of the wrong shape so to be used.

3. The votive terracotta.

4. The settlement lies close to one of the few springs in the neighbour-

[1] The presence of geometric and protocorinthian sherds establishes that this settlement was founded before the origin of the Isthmian games in the early sixth century.

hood: and though more westerly, it still lies at the foot of the high acropolis with its rock-cut top.

5. Pausanias, who it is agreed entered from the east, refers first to the stadium and theatre, and later to the temple: this suggests that the latter lay west of the two former.

There are, of course, arguments against the hypothesis: for example, why is the settlement so far from Pausanias' 'theatre and stadium of white marble'? We could answer that it only appears far in comparison with the traditional 'temenos': in fact, the stadium is but six or seven minutes' walk: and again we have no evidence for the existence of either this theatre or this stadium in classical times: the theatre certainly and the stadium probably are of Roman work throughout.

Again, it is singular that more should not be preserved on the site in section D: but two points should be remembered: first, that the depth of soil is even shallower here than anywhere else: second, we must emphasise that only a very small portion of the excavable area was dug by us. To dig the area thoroughly would be a task of great magnitude: all the many underground channels, some very difficult of access, would have to be emptied, and the shallow surface-soil trenched over a wide area, not dug by means of pits as was done in this case. But, despite the slightness of our material, we are able to state first that the temenos certainly did not exist in the spot hitherto supposed; second, that we consider it highly probable that it should be sought on, in, and perhaps even under, the banks of the Kyras Vryse ravine.

R. J. H. Jenkins.

THE CHRONOLOGY OF SOME MIDDLE-BYZANTINE CHURCHES

(Plates 27–31)

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Introductory.

Millet has established that the Greek church-builders were in a large measure independent of their contemporaries in the imperial capital.[1] The independent Greek School whose limits he sought to trace reached the peak of its achievement in the two centuries prior to the Latin occupation, and most of the Byzantine churches in Central Greece and the Peloponnesus belong to this period. Millet's approach to these Middle-Byzantine churches was retrospective, his starting-point being Mistra, capital of the restored imperial province. He was interested in the Greek tradition less for its own sake than for its contribution to the later architecture of the last Byzantine 'Renaissance.' While he has endeavoured to resolve the problems which the origins of certain of its characteristic features present, and to gauge its legacy to Arta and Mistra, he has treated more summarily the development within the limits of the eleventh and twelfth centuries. This period is one deserving of particular attention, since its closer study may throw new light on buildings later in date and lying outside the then

[1] *L'École grecque dans l'architecture byzantine* (Paris, 1916). My debt to this invaluable study will be apparent throughout the following pages. I should also like to record my gratitude to Mme. Soteriou and her husband the Director of the Byzantine Museum at Athens for advice and assistance in collecting my material, to Mr. Schultz Weir for permission to reproduce figs. 1 and 2 on pl. 31 from his unpublished drawings and to Mr. H. M. Casson for his photograph of Hagia Mone (pl. 28, 4).

boundaries of the Greek School. Moreover, the intrinsic worth of the Middle-Byzantine monuments demands a better understanding.

Any new estimate of Byzantine architecture in Greece or more detailed study of its development must necessarily be based on an exact chronology. This at present is wanting. The chronological criteria which now obtain are too vague and not infrequently based on quite erroneous premises. Datings suggested on scant evidence when the study of the subject was in its infancy have been too readily accepted in later years. The present article within the limits of the eleventh and twelfth centuries and within a restricted sphere attempts to provide an accurate standard for the dating of the Greek churches. I believe that this is a necessary basis for any scientific study of the subject and hope that it may serve as a starting-point for some more comprehensive survey.

The churches of Athens, Attica and the surrounding country form the nucleus of the group here dealt with, not so much because relatively great importance is claimed for Athens as a centre, but merely because there churches have been preserved in greater numbers than elsewhere in Greece and have, owing to their proximity to the present capital, been most frequently and carefully studied.[1] In order to obtain a series covering the whole period and representing every phase of the architectural development, outstanding churches in Boeotia, Phocis and Argolis have also been included. It has even been found necessary to pass to Elis to find examples of late date to counterbalance the paucity of surviving monuments in or near Athens for the thirty years immediately preceding the Latin Conquest.

Some explanation is due for two notable omissions: Hosios Meletios and Varnakova, with regard to whose foundation we possess historical data, apparently of great value for the chronology of the period.

Hosios Meletios (on the borders of Attica and Boeotia some 7 km. east of the classical Eleutherae). On the advent of Meletios [2] the monastery was already in existence, but we may reasonably connect some part at least of the present buildings with the alterations and additions which were effected during his lifetime and therefore date from about the year 1100. The church as it exists to-day is a Naos of the usual tetrastyle type with the triple sanctuary projecting to the East, but on the West and South it is

[1] In the Εὑρετήριον τῶν Μεσαιωνικῶν Μνημείων, I, Ἀθηνῶν (Athens, 1927 and 1929), the Greek Archaeological Service has published an admirable survey of the Athenian churches which includes full bibliographical notes and a complete series of plans. For elevations and architectural details generally it is unfortunately dependent on previous publications which are incomplete and often inaccurate; consequently, some of the points which I have observed on the churches themselves and which are here recorded for the first time must await confirmation in the first complete publication of the buildings.

[2] The two *Synaxaria* were published by Vasilievski, *Pravoslavni Palestinski Sbornik*, VI. fasc. 2. Cf. K. Konstantopoulou, Ἡ Μονὴ Ὁσίου Μελετίου (Δελτ. Χριστ. Ἀρχ Ἑτ., 1924, fasc. 1), 49 ff. and Millet, *Le monastère de Daphni*, 18 ff.

enclosed by an agglomeration of Nartheces, Porches and Chapels differing greatly in style. It has not as yet been systematically examined from the architectural view-point nor is the material so far published sufficient to give a satisfactory impression.[1] This church, apart from architectural considerations, must by virtue of its size and wealth of carved ornament be counted among the most important Middle-Byzantine foundations; but I have omitted it from the present series for fear of confusing the argument with discussions of a building which is still almost unknown.

Varnakova (16 km. north-east of Naupactus). Among the archives of the monastery is a document of the eighteenth century [2] containing a valuable building record which may be summarised thus:

1077 The Inner Church or Sanctuary of the Theotokos.
1148 The Second Church.
1151 The Eso-narthex.
1229 or 1230 The Exo-narthex.

The first two items are confirmed in a twelfth-century inscription [3] over the door between the Narthex and Naos of the present church and there is therefore no reason to doubt the authenticity of the remainder. Unfortunately this precise information is of no assistance to the present study, for the church was blown up by the Turks in 1846 and rebuilt five years later. The only part which survived intact was the Exo-narthex which, dating from the thirteenth century, does not fall within our period. Of the twelfth-century church only a fine mosaic pavement, a few carved fragments of marble and the West wall of the Eso-narthex remain. These are not sufficient to justify inclusion, nor from Orlandos' publication do they seem to present any architectural feature which is not adequately covered by the selected examples.

EXTERNAL EVIDENCE

§ 1. Documentary.

1. *HOSIOS LOUKAS, PHOCIS.* Diehl pointed out in his early essay on the monastery that the various traditions referring the building of the churches to the middle of the tenth century fall into two classes.

[1] Plan in Orlandos, Μοναστηριακὴ Ἀρχιτεκτονική (Athens, 1927), fig. 7; photograph from South-East published by Konstantopoulou, *op. cit.* 58, fig. 2.

[2] Discussed by Lampros, Νέος Ἑλληνομνήμων, VI, 382 ff.; cf. Orlandos, Ἡ Μονὴ Βαρνάκοβας (Athens, 1922), 7 ff. It comprises a series of notes in Greek and Italian relating to the early history of the monastery. The bilingual entries do not exactly correspond and it is evident that both Greek and Italian versions are based on a third, much older.

[3] *C.I.G.* 8730; published with corrections by Orlandos, *op. cit.* 7.

Those that derive from an anonymous text written evidently in the second half of that century and those that are mainly hypothetical.[1] The latter by their palpable inconsistencies are unworthy of consideration. From the anonymous text we learn that two years after the saint's death (*i.e.* probably in 951) a church, which had been started by the saint himself and was dedicated to St. Barbara, was completed and that over his own tomb an Oratory was built.[2] Diehl has shewn conclusively that these buildings cannot be identified with the two churches that remain to-day. The authors of the English monograph on the monastery have established by a careful examination of the junction between the two churches that the Katholikon dedicated to St. Luke with the chapel of St. Barbara in a crypt under it is the older. They suggest that it replaced the original church of St. Barbara and that the later and smaller Theotokos church occupies the site of the Oratory.[3]

The representation of St. Nikon, who died in 998, in the mosaics of the Katholikon seems to favour a date after 1000 for its erection. On the other hand, it has recently been pointed out that St. Meletios, who was one of the most notable figures of the Greek Church in the eleventh century, and still living about the year 1100, is not figured.[4] This in conjunction with the representation of St. Nikon suggests a date early in the century for the setting of the mosaics, and there is every reason to believe that this followed directly on the completion of the building.

We may conclude then that the Katholikon was probably built in the early years of the eleventh century, the Theotokos later. Yet not much later, for the monks on the completion of the Great Church, realising the anomaly of having two buildings in the same enclosure dedicated to a single saint, would have hastened to transform the older Oratory into a shrine for the ever-popular Theotokos.[5]

2. *DAPHNI, ATTICA.* M. Millet has dated the building of the church in the last years of the eleventh century chiefly on historical grounds. The

[1] Diehl, *L'Église et les mosaiques du couvent de Saint-Luc* (Paris, 1887), 6–7. [2] *Ibid.* 8–9.

[3] Schultz and Barnsley, *The Monastery of St. Luke of Stiris in Phocis* (London, 1901; henceforth S. and B.), 22. Their interpretation, in so far as it affects the dating of the churches, has since been generally accepted. Cf. Wulff, *Das Katholikon von Hosios Lukas* (*Die Baukunst*, ser. II, 11, 1903), 3–4; *id.*, *Altchristliche und Byzantinische Kunst* (Berlin-Neubabelsberg, 1914), II, 461; Diehl, *Manuel d'art byzantin*[1] (Paris, 1910), 435; *ibid.*[2] (1925–6), 463.

[4] Demus and Diez, *Byzantine Mosaics in Greece* (Harvard, 1931), 108. Meletios granted remission of sins with the permission and authority of the Patriarch Nicholas III (1081–1111); *v. supra* p. 91[2].

[5] The two sarcophagi in the crypt which tradition associates with the Emperor Romanus II and his wife do not help to date the church. The Emperor in question is known to have been buried at Constantinople in the church of the Holy Apostles. Again the sarcophagi seem to be of different dates in view of their different decoration and they need not necessarily be connected with the founders. Cf. Demus and Diez, 107.

monastery is mentioned in eleventh-century documents and it is unreasonable to suppose that the sixth-century church survived until that time.[1] Most important is the mention in the Life of Meletios of a monk of Daphni who sought in the company of the Cappadocian hermit a more rigid discipline than was to be found in his own monastery, where life seems to have been comparatively lax.[2] As Meletios' regime is commonly placed in the last years of the eleventh century this would imply a wealthy community at Daphni before 1100. It is probable *prima facie* that the present church, known to be the second on the site, was erected during this period of prosperity. The mosaics are dated on stylistic grounds about the year 1080.[3]

3. *IOANNES KYNEGOS AND KAISARIANE, ATTICA.* One may assume from the fact that Michael Akominatos [4] addressed letters to their Abbots that the monasteries of Ioannes Kynegos [5] and Kaisariane [6] in Attica were flourishing in the first decade of the thirteenth century and were in all probability founded earlier.

4. *HAGIA MONE, AREIA, ARGOLIS.* An entry in the list of the bishops of Nauplia and Argos mentions one of their number, Leon, as builder of the μοναστήριον τῆς Νέας Μονῆς in 1143–4.[7] In a *hypomnema* preserved in Turin signed by the Bishop and dated 1143 there is further mention of this foundation.[8] It is described as ἐν τῇ τοποθεσίᾳ τῆς Ἀρείας, which leaves no doubt of its identity with the monastery now known simply as Ἁγία Μονή. The salient points of the text are these: the monastery was previously inhabited by nuns; owing to the proximity of the sea their property and their persons were continually at the mercy of pirates; the Bishop built them a new convent at a place called Βούζη, further from the sea, repaired the monastery at Areia, and in it established a community of monks—τὴν δέ γε προτέραν τούτων Μονὴν ἀνδρῴαν μετεσκευάσαμεν. The entry in the list of bishops together with this passage in a text which bears the same date provide good grounds for dating the church in 1143. Further light is thrown on its erection by an inscription on the church itself (*v. infra* p. 97).

5. *MERBAKA, ARGOLIS.* The one clue in the Turin codex to the position of the convent which Leon founded is its location πόρρω διακείμενον

[1] Millet, *Le monastère de Daphni*, 17. [2] *Ibid.* 18 ff. [3] Demus and Diez, 110.

[4] Metropolitan of Athens 1182–1204. Subsequently exiled in Keos (*d.* 1220).

[5] Lampros, Μιχαὴλ Ἀκομινάτου τὰ σωζόμενα (Athens, 1880), II, 247 and 628 ff.

[6] *Ibid.* II, 311. Both letters were written from Keos, that to Ioannes Kynegos in 1207, the other two years later.

[7] Struck, *Vier Byzantinische Kirchen der Argolis* (*A.M.* 1909, 230).

[8] Miklosich u. Müller, *Acta. Dipl.*, V, 178. The relevant passages are discussed at length by Struck (*op. cit.* 230 ff.).

τῆς θαλάσσης περὶ τὴν τοποθεσίαν τοῦ Βούζη. Struck[1] identified the fine church at the village of Merbaka with the new foundation and dated it in accordance with the historical details a few years before Hagia Mone (*i.e.* circa 1140). In confirmation he points out that Merbaka lies further from the sea than Areia and that the church is dedicated to the Panagia, which corresponds with the words τῆς πανάγνου δεσποίνης ἡμῶν καὶ θεομήτορος of the *hypomnema*.

I do not think he has produced sufficient evidence to prove his hypothesis; I would contest this identification on the following grounds:

1. Merbaka is a parish church and the total absence of remains of dependent buildings makes it extremely unlikely that it was originally a monastic foundation.
2. Though Merbaka is unquestionably further from the sea than Hagia Mone it cannot be said to be any more secure. The monastery is situated in a fold of the hills behind Nauplia, whereas Merbaka lies in the middle of the Argive plain whose pillage would be the first object of any piratical incursions.
3. The situation does not offer the seclusion which is properly associated with the monastic life. Though it cannot be shewn that the village on whose outskirts the church lies was there at the time of its erection, the plain on account of its fertility must always have been thickly populated.
4. Even if Struck's derivation of the present name from William of Meerbeke,[2] Latin archbishop of Corinth from 1277, is accepted, this is no proof that Merbaka was formerly called Vouzi.
5. The historical facts shew that the Vouzi church was somewhat anterior to the new church at Hagia Mone; all the architectural evidence, as will be shewn below, points to the Merbaka church being considerably later.

6. *SAGMATA, BOEOTIA.* The chrysobullon of the Emperor Alexius Comnenus dated 1106 and preserved in the monastery[3] recording a gift of a piece of the true cross naturally leads one to suppose that the monastery, and perhaps the present church, were in existence in that year. Lampros has, however, shewn that the document is a forgery.[4] For the dating of the church one is therefore entirely dependent on the architectural evidence.

§ 2. Epigraphic.

1. *PANAGIA LYKODEMOU, ATHENS.* A series of obituary inscriptions is incised on the inside of the south wall of the church near the

[1] *Op. cit.* 233.
[2] *Ibid.* 236.
[3] Miklosich u. Müller, V, 253.
[4] Νέος Ἑλληνομνήμων, XIII (1916), 363.

west end. Of these the earliest records the death of the founder in 1044.[1]

2. *H. THEODOROI, ATHENS.* Built into the west wall of the church are two inscriptions, one of which is dated and reads as follows:

+ Μη(νὶ) Σεπτεμβρίῳ ἰνδ(ικτιῶνος) γ' ἔτους ,ϛφνη'

The date (6558) reduces to A.D. 1049 according to the Constantinopolitan era, but this corresponds not to the third indiction but to the second. In the Alexandrian chronology it reduces to 1065, which date, as it answers exactly to the third indiction, must be considered as the correct reading.[2]

From its position above the main door of the church one would naturally suppose that this inscription commemorates its erection. However, more than one scholar has questioned this assumption, yet without bringing forward sufficient evidence to warrant its rejection. Millet, though he accepted 1049 as the building date for the purposes of his study, suggested that the inscription was not in its original place.[3] Certain features of the church doubtless seemed to him precocious for that date, but had the correct reading (1065) been established at the time he wrote they might not have seemed so. There is, however, further ground for suspicion in the adjacent inscription,[4] the substance of which is that the former church being old and dilapidated a certain Kalomalos re-erected it. Xyngopoulos accepts this second inscription as referring to the building which survives. With regard to the dated inscription he is quite definite that it has no connection with the other, nor with the erection of the church, but was built into it much later and came probably from its predecessor.[5] This is only a statement of opinion, for he brings forward no arguments to support his claim. The facts are these:

1. *The two inscriptions were built into the church contemporaneously and at the time of its erection.* They are embedded together in a panel disposed symmetrically about the west window. Considered alone the Kalomalos inscription lacks this symmetry. The panel constitutes a feature to which the design of the west gable has been adjusted. The course of which it forms a part lies between the top of the terracotta frieze and the cill of the window and continues from end to end of the gable between brick dentils.[6] There is no corresponding course on the south gable where the top of the frieze is at the same time the cill of the window.[7]

[1] Ἐφημ. 1853, 937, no. 1589; *C.I.G.* IV, 9336; Antonin, *O Drevnikh Kristianskikh Nadpis'ach u. Afinakh* (St. Petersburg, 1874), 4, no. 4, facsimile pl. iii, no. 4; cf. Millet, *L'École grecque.*, 7[1].

[2] Ἐφημ. 1854, 1214, no. 2448; Εὑρετήριον, I, fig. 66.

[3] *Op. cit.* 7[2].

[4] *C.I.G.* 8803; Εὑρετήριον, I, fig. 65.

[5] Εὑρετήριον, I, 68, 73.

[6] Couchaud, *Choix d'églises byz. en Grèce* (Paris, 1842), pl. 9. 1.

[7] *Ibid.* pl. 10, 2; Castellazzi, *Ricordi di Architettura Orientale* (Venice, 1871), pl. 5.

2. *The present building must on grounds of style be dated if not in the eleventh century then early in the twelfth.*[1]

3. *If the dated inscription came from the previous church on the site, then this was erected in* 1065.

If our inscription which has been in the present church since its erection does not record its building date, then it must have been taken from some other older building erected in 1065. Naturally one would suppose this to be the previous church which gave place to Kalomalos' building. Now in that case the older church would have been built in 1065 and it is exceedingly unlikely that it would have been already in a state of dilapidation [2] when Kalomalos started the present church. For that, in the most generous stylistic estimate, cannot have been more than a hundred years after the building of the old church in 1065, and Athenian churches known to be older, such as the Panagia Lykodemou, have survived until to-day in remarkably good condition. Obviously it is unsatisfactory to relate our inscription to the previous church, and if its connection with the existing one is still disclaimed, how else is its presence to be explained?

The two inscriptions were, possibly, cut by different hands, but there is nothing else in either to warrant the acceptance of the one as contemporary with the church into which they are built and at the same time the entire rejection of the other. I shall assume that the present church was erected by Kalomalos in 1065 to replace an older one, and by shewing that this date is absolutely consistent with conclusions based on considerations of technique and style I shall hope to justify the assumption.[3]

3. *HAGIA MONE, AREIA.* An inscription built into the west wall of the church commemorating its foundation by Leon of Argos is dated 1149.[4] This in conjunction with the text already discussed suggests that the building of the church was started in 1143 but not completed until 1149.

4. *IOANNES KYNEGOS, ATTICA* (Μονὴ Ἰωάννου τοῦ Κυνηγοῦ, τῶν Φιλοσόφων). The monastery's second designation, 'of the Philosophers,' connects the three inscriptions found in various places which have been related to it:

I. The inscription on a column which stands a kilometre to the north of the monastery, at the point where the road from Athens crosses the ridge

[1] Some opinions: Mme. Soteriou: eleventh century (Ἐφημ. 1931, 137); Xyngopoulos: probably twelfth century (Εὑρετήριον, I, 74).

[2] The relevant passage in the inscription is:

τὸν πρὶν παλαι(ὸν ὄν)τα σου ναόν, μάρτ(υς,
καὶ μικρ)ὸν καὶ πήλινον καὶ σαθρὸν λίαν,

[3] For additional note *v. infra*, p. 130.

[4] Struck, *op. cit.* 229.

into the Mesogeia, recording its erection by one Neophytos.[1] It is dated 1237/8 and is followed by the monogram:

φ
C φ = φιλόσοφος
λ

II. An inscription whose provenance is not recorded, now in the Byzantine Museum at Athens (no. 329).[2] It commences thus:

κεῖται μοναχὸς ἐνθαδὶ Λουκᾶς κτίτωρ
σὺν φιλοσόφῳ κ. τ. λ.

and ends with the date 1235. Koukoules identifies Neophytos of I with the philosopher of II. But as the column inscription post-dates that recording his burial by two years, Koukoules is forced to conclude that though the column was erected by him the inscription was not cut in it until after his death. This is a possible though not an altogether convincing explanation.

III. A fragment of a templon epistyle found on the Acropolis, now in the Byzantine Museum (no. 204) has this fragmentary inscription:

. . ΟC ΦΙΛΟCΟΦΟC ΤΟ(υ̣ ε̣)ΠΙΚΛΗΝ Є(τ̣ο̣υ̣ς̣) ,ϛΨΙΓ' (1204/5)

The date is somewhat damaged and Strzygowski misread it as ϛΥΠΓ (974/5), from which he concluded that the present church in the monastery was a tenth-century building.[3] Actually such a date is impossible, for the fragment in question is carved with a style of ornament unknown before the twelfth century. But in any case I do not think there is sufficient evidence for relating this inscription to the Hymettan monastery. In the first place, the fact that it was found built into the fortifications of the Acropolis cannot adequately be explained by an assumed shortage of building materials in Athens.[4] Further, there still remains *in situ* in the church a part of the original templon epistyle.[5] This has no inscription and differs both in dimension and design from the fragment in the Museum.[6]

It seems that φιλόσοφος may have been the usual epithetical title for a holy man in Byzantine Greece. Strzygowski notes a Μονὴ τοῦ φιλοσόφου

[1] *C.I.G.* 8752; Kampouroglou, Ἡ Στήλη τοῦ Νεοφύτου in Μελέται καὶ Ἔρευναι – τὰ Ἀττικά (Athens, 1923), 130 ff.; Koukoules, Τὸ Κιόνιον τοῦ Νεοφύτου, Ἐπετηρὶς Ἑτ. Βυζ. Σπουδῶν, Η' (1931), 148 ff.

[2] Soteriou, *Guide du musée byzantin d'Athènes* (Athens, 1932), 67, fig. 40; Koukoules, *op. cit.* 150.

[3] Ἡ Μονὴ τοῦ Κυνηγοῦ τῶν Φιλοσόφων (Δελτ. Ἱστ. Ἐθν. Ἑτ., III, 1889), 121. The three inscriptions have attracted the attention of scholars to the church, which has thus attained a position of importance it does not deserve, for it is small in scale, ill-constructed and of meagre architectural interest.

[4] *Ibid.* 122.

[5] Published by Soteriou, Ἐφημ. 1924, 22, fig. 38.

[6] For additional note *v. infra*, p. 130.

founded in the tenth century near Patras.[1] The possibility of there having been a church with a similar dedication in Athens should not have been overlooked. The inscription on the column of Neophytos is the only one of the three which can reasonably be connected with the monastery in question. For the dating of the church it provides what is plainly a very late *terminus ante quem*, later even than that which we have already derived from Michael Akominatos' letter.

Summary of External Evidence.

Katholikon, Hosios Loukas	after 1000.
Theotokos, Hosios Loukas	after the Katholikon.
Panagia Lykodemou, Athens	before 1044.
H. Theodoroi, Athens	1065.
Daphni, Attica	*circa* 1080.
Hagia Mone, Argolis	1143–1149.
Ioannes Kynegos, Attica	before 1207.
Kaisariane, Attica	before 1209.

INTERNAL EVIDENCE

§ 1. General Considerations.

Introductory.

A study in comparative chronology is necessarily based on two major assumptions: that at a given time there was unity of technique throughout the area studied and, secondly, that differences of style represent different points in a continuous development. In the present case the justification for these assumptions, contested by at least one distinguished scholar,[2] is to be found in the particulars regarding the building trade which are given in various Byzantine authors.[3] The craftsmen were organised in travelling Guilds (Συνεργασίαι). This in itself would ensure unity of style over a given

[1] *Op. cit.* 122[1]. This is Lampardopoulos' foundation at Demitsane. A sigillion of the Patriarch Polyeuctos dated 964 ('Εφημ. 1854, 1216; Miklosich u. Müller, V. 250) mentions the monastery as recently built; it is now deserted and in ruins. It is unlikely that the small church which Zachos has published (Δελτ. VIII (1923), 59 ff.) belongs to the original foundation. Its dome has features which are not found elsewhere before the twelfth century and it possibly belongs to an even later date.

[2] Strzygowski à propos of Kaisariane ('Εφημ. 1902, 62) claimed that difference of style is not interpretable as the result of continually developing technique, but rather as the product of different conditions; the resources of the builder are one controlling factor, the individual taste of the architect another. This view has been disregarded both by later historians of byzantine architecture, and by Strzygowski himself in other fields of research.

[3] See especially Choisy's chapter 'L'Art byzantin et les classes ouvrières au bas empire,' *op. cit.* 169 ff.

area at any time; while, on the other hand, new techniques whether due to isolated experiment or to external influence would with difficulty replace the old, but once embodied in the general tradition would be universally employed.

The considerable variety of plan in churches approximately contemporary seems at first contradictory. The choice of plan was, however, by no means arbitrary; each church conformed to one or other of about half a dozen types, large and small, which at a given date varied but little through the whole of Greece. The builder no doubt chose from among these according to his resources, and perhaps his individual preference. But there his control ended, he could not break the continuity of a strong tradition. Together with diversity of type there was inevitably identity of structure. So in painting the Byzantine artist retained a single manner for a wide range of subjects. The humblest and most pretentious architectural expressions were framed in a common medium; technique of structure and ornamentation united them. Architecturally the difference between the rich monastery church and the village chapel is one of degree only, not one of kind.

The plan types remained remarkably constant throughout the period, and the slight variations that are found are never in themselves adequate evidence for dating but rather are apt to lead to erroneous conclusions. The only important developments were in building technique. Here again the analogy with painting is perfect. The iconographic system was rigid, and the work of different periods and schools can be traced more easily in technical progress than in composition. In architecture, then, not plan, but structure; this is the safest, indeed the only safe clue to the chronology of the period.

Materials.

1. *Stone and Marble.* The characteristic walling of Greek churches was the combination of stone with thin tile-like bricks. Yet frequently on classical sites where cut stone and marble were ready to hand this system gave place to an indiscriminate use of the old materials. The ancient Stiris was evidently the source of the marble blocks of which the Katholikon of Hosios Loukas is largely built.[1] Between these the regularised brick and stone work appears only occasionally. In the Panagia Gorgoepikoös (Little Metropolis) at Athens the usual walling gives place to façades entirely of marble, for the most part old material.[2] The Boeotian church of H. Nikolaos sta Kampia provides another example of a church faced with

[1] Frazer, *Pausanias*, X, 35, 8; S. and B., 23.

[2] Dating on structural grounds is on this account impossible. The latest of the marble fragments built into the church are of twelfth-century style; a detailed study of these, the most satisfactory evidence for the dating of the building, is not within the scope of the present article and the church is therefore not included in the chronology.

marble throughout.[1] Here each block has been dressed for its present position and may have been specially quarried. The marble walling of this church may be explained by the lack of clay suitable for brick-making in the district. In churches subsequent to Hosios Loukas when old material is used there is an increasing tendency to regularise it. It is confined to the lower courses or even arranged in a uniform plinth as at Merbaka,[2] but after the Latin Conquest the material was used in the old haphazard manner.[3]

2. *Brick.* Walling entirely of brick is found though rarely in Early Christian buildings in Greece, where it seems to be a survival of the Roman tradition.[4] But it appears in the eleventh and twelfth centuries only where its use can be explained by the influence of the capital. Thus it is found in the apse of the Katholikon of Hosios Loukas and on its north façade in the conch-headed recessions, which are themselves a Constantinopolitan feature.[5]

3. *Brick and Stone.* With these few examples excepted, the instances where brick and stone are used separately are negligible beside those where they are used together. The horizontal courses of stone are in characteristic examples separated by a single or double row of bricks and in each course stone alternates with vertical brick.

The *parement cloisonné*, as Millet has aptly called this system, requires considerable technical skill and a building stone that is easily worked; as a result it is often used only in the upper courses, while at the base of the wall a less careful construction is general. Sometimes this is of rubble, and in this connection it should be noted that the regular *cloisonné* façade is structurally only a facing to a less regular core.[6] Frequently in the smaller Middle-Byzantine churches the facing is only used to enhance their outstanding features, while elsewhere the walling is of an irregular brick and stone rubble.[7]

Alternatively large blocks of stone or marble roughly squared often occupy the lowest courses. At first they are used without any attempt at

[1] S. and B., 69. A third example is the Vlacherna church near Mezappo in Mani.

[2] Struck, *op. cit.* pl. X: Millet, *op. cit.* fig. 129.

[3] *E.g.* Panagia near Vatheia, Euboea: *ibid.* fig. 22; Lampakis, *Mémoire sur les antiquités chrétiennes de la Grèce* (Athens, 1902), fig. 85. The church has many features of the architecture which developed under the despots of Epirus, and dates from the second half of the thirteenth century at the earliest.

[4] *E.g.* The basilican church and Martyrium at Corinth; cf. *A.J.A.*, 1929, 348.

[5] S. and B., pl. 6.

[6] Choisy, *op. cit.* 12. Cf. the interior and exterior views of Christianou: Millet, *op. cit.* figs. 57–58.

[7] Cf. Kaisariane, where the *cloisonné* system is used only on the east end and the north and south gables (Strzygowski, *loc. cit.* 59, fig. 4 *b*); Ioannes Kynegos, rubble throughout save in the apse and dome (pl. 28, 2); Omorphe Ekklesia, a plinth of rubble all round the church, elsewhere *cloisonné* (Orlandos, Ἡ Ὄμορφη Ἐκκλησία, Athens, 1921, figs. 6, 7).

regularity at the Theotokos church of Hosios Loukas and two Athenian examples, the H. Apostoloi and the Panagia Lykodemou. In the Kapnikarea church, however, they are arranged in a regular pattern so as to form a continuous frieze of crosses. The horizontal arms constitute a single course across the façade and the spaces between the vertical arms are filled with smaller blocks with or without the brick surround.[1] An exactly similar arrangement is found at Daphni.[2] The masonry of the lower courses of H. Theodoroi at Athens has been much damaged and much repaired, but enough remains at the west end to show that a similar motif was used. This is important, for the use of the cross frieze on this dated church suggests a date in the second half of the eleventh century for the few other churches where it is to be seen.

This treatment remains in a modified form in the twelfth century in the dated Hagia Mone.[3] But here the crosses are much fewer in number and each stands isolated in the masonry. Similar isolated crosses are in the churches at Chonica,[4] Amphissa [5] and the monastery of Sagmata in Boeotia, which on that account belong to the twelfth century rather than to the earlier group.

The regularised combination of brick and stone remained the basic walling system through the two centuries and even survived the Latin occupation. Yet within this constant frame-work it is possible to trace a number of variations which characterise particular periods and distinguish various groups of churches. The system appears fully developed in the Katholikon of Hosios Loukas, the first building of the series, in the upper courses of the north, south and west façades. This presupposes its earlier use elsewhere, but though it is found in one of the few churches which seem to belong to the tenth century [6] its origin remains a matter for conjecture.[7]

§ 2. Brick Patterns.

The development of brick as a decorative medium in the façade produced the most notable variant of the *cloisonné* system in its simplest form.

[1] This is visible on the south façade, shown though not clearly on two published photographs: Millet, *op. cit.* fig. 75; Struck, *Griechenland* I, *Athen. u. Attika* (Vienna–Leipzig, 1911), fig. 73; cf. (Weir Schultz) *The Athenian Churches* (*The Builder* 57 (1889), 379 ff.), fig. 4.

[2] North façade: Millet, *Daphni*, pl. VI, 1; south façade before restoration: Schlumberger, *L'Epopée byzantine*, III, 549. This feature has been incorrectly rendered by the draughtsman of Millet's plates IV and V.

[3] Millet, *op. cit.* fig. 69; Struck, *Vier Byz. Kirchen der Argolis*, pl. XI, 4.

[4] *Ibid.* pl. IX, 4 and 5. [5] Lampakis, *Mémoire*, fig. 42; Struck, *op. cit.* fig. 8.

[6] H. Georgios, Alaï Bey, near Skala in Laconia. Two photographs have been published: by Millet, *L'École grecque*, fig. 128 (from south); by Mme. Soteriou, Λακωνικά, I (1932), 45, fig. 8 (from north-east).

[7] Cf. Millet's hypothesis, *op. cit.* 228.

In the interspace of mortar between two adjacent stones brick fragments were embedded so as to form a pattern with their exposed ends. The method has been graphically illustrated by Schultz and Barnsley [1] in connection with the examples on the Theotokos church at Hosios Loukas. In Athens the façades of the Theotokos are paralleled in the church of the Panagia Lykodemou. This is the largest of the surviving Athenian churches, and at first sight it seems that this extravagance of ornament was applied only to those few churches where expense was no object. That this was not the case is shewn both by the absence of this treatment in important churches such as Daphni, evidently later, and by its employment in the church of the H. Apostoloi at Athens. The latter is a comparatively small building, and the use on its central dome supports of four classical capitals, no two of which are alike, among other things attests the humble circumstances of its erection. It would seem then that this elaborate brick decoration is to be associated with a particular period.

In the Katholikon of Hosios Loukas, for which external evidence indicates an early eleventh-century date, the patterns, though few, shew that by then the technique had been completely mastered and we must assume that the process originated at an earlier date. Millet derives it from the habit of filling the interstices of irregular masonry with brick fragments.[2] 'Le maçon s'aperçoit qu'il façonne des lettres et, de l'expédient, il fait un procédé.' It is not improbable that these alternating brick patterns represent the last stage in the evolution of the regular *cloisonné* walling from a rougher rubble masonry.

It is plain that some of the patterns have a christological message, but Lampakis' efforts to discover a religious significance for all of them were doomed to failure.[3] It remained for Strzygowski in 1905 to point out for the first time a connection with the flowered Cufic inscriptions of contemporary Islam.[4] Millet has defined another class which reproduces Greek characters, and a detailed study reveals the necessity for adding a number of smaller groups. These will be considered in what appears to be their chronological order; but only the Cufic group, which is by far the largest and for purposes of dating the most important, will be dealt with in any detail.

I. Geometric.

The forms are determined by the size and shape of the space to be filled and by the ingenuity of the craftsman. They bear no relation to written characters, and the units, which are rarely cut, are arranged in

[1] *Op. cit.* fig. 15.

[2] *L'École grecque*, 254.

[3] Χριστιανικὴ Ἀρχαιολογία τῆς Μονῆς Δαφνίου, Athens, 1889 (henceforth: Lampakis, *Daphni*), 84 ff.; *Mémoire*, 21 ff.

[4] *Comptes Rendus du Congrès International d'Archéologie* (Athens, 1905), 312. Strzygowski elaborated his thesis in *Amida*, 372 ff.

purely geometric figures. To the two examples at the Katholikon (pl. 30, 46, 47) may be compared three from the church of the H. Apostoloi at Athens (pl. 30, 11, 14, 21). They suggest a stage intermediate between the fillings in rough masonry, which consist of horizontal fragments alone and attempt no ornament, and the regular panels of the systematically patterned façade. A relatively early date for this style is therefore indicated.

II. Cufic.[1]

The relation to contemporary Arabic inscriptions is shewn both by the arrangement of the brick fragments in identical figures and by the cutting of the individual units which compose them. A characteristic which the brick patterns and the Cufic models have in common is the beak-shaped head to all vertical members. So close is the connection that it is explicable only by the presence of Arab craftsmen in Greece during the eleventh century. In recent years important evidences have come to light which for Athens at least corroborate this hypothesis.[2]

The Athenian churches of the H. Apostoloi and the Panagia Lykodemou with those at Hosios Loukas form a compact group which must be placed in the first half of the eleventh century. The Katholikon where the designs are simplest and fewest in number is unquestionably the earliest. All the nine patterns are illustrated on pl. 30, 46–54; of these nos. 48–53 are based on Cufic forms. It will be seen that though the patterns are of greater size than those elsewhere, there has been little attempt at detailed cutting. This fact suggests a relatively early date for the Katholikon.

The two churches in Athens represent a later stage of development; here the technique tentatively employed at the Katholikon has been completely mastered. The motifs used on the latter church are retained but are considerably elaborated. Considerations of detail would indicate an earlier date for the Apostles' church than for the Panagia Lykodemou; the vertical unit cut into two beaks at the top occurs only three times in the patterns of the former (pl. 30, 13, 25 and 37), in those of the latter it is far more frequent and the single beak is exceptional. Representative examples of the Lykodemou patterns are illustrated in pl. 30, 38–41, but there are others[3]; the series from the H. Apostoloi (1–37) is complete. The Theotokos of Hosios Loukas, where the brick ornaments are marked by a

[1] The term is used to cover all figures which derive ultimately from the early Arabic alphabet, whether they are interpretable as specific Arabic characters or not.

[2] Notably a series of Cufic inscriptions, cut in Pentelic and Hymettan marbles which epigraphists date within the limits of the ninth and eleventh centuries. The most important of these, from the Asclepieion, records the dedication of a mosque. See Soteriou, Ἀραβικὰ Λείψανα ἐν Ἀθήναις (Πρακτ. Ἀκαδ. Ἀθ., 1929), 266 ff.

[3] Cf. A(ntonin), *Khristianskiā Drevnosti Gretsii*, i, *O Drevnikh Tserkvakh Goroda Afin* (*Zhurnal Ministerstva Narodnago Prosv'eshtcheniā*, LXXXI (1854), ii, 31 ff.), fig. 13, line 2.

greater intricacy of detail,[1] must also be placed after rather than before the Apostles' church.

Cufic Friezes by Embedding Process. The Theotokos is thrown together with the Panagia Lykodemou by a new technique they have in common, but which being absent from the H. Apostoloi provides a very satisfactory confirmation of its earlier dating. One of the motifs which appears in the patterns of all three churches [2] is elaborated and multiplied so as to form a continuous frieze in a single course from which the stone blocks are entirely omitted. Such a frieze appears in its simplest form on the north side of the Panagia Lykodemou (fig. 1); the western part has been restored. On the east end of the Theotokos there are three such friezes, one above the other. The central one [3] most nearly reproduces that of the Athenian church, the

Fig. 1.—Panagia Lykodemou, Athens. Cufic Frieze from North Façade. (Scale 1 : 15.)

lowest [4] differs only slightly and in the uppermost similar brick shapes are used to form a different, more cursive design.[5]

Cufic Friezes by Champlevé Process. At first sight it would appear that the Theotokos by the complexity of its designs postdates the Panagia Lykodemou. The difference is, however, one of degree only and the elaboration of the former is easily accounted for by its association with one of the most wealthy foundations in Greece. Technical development rather than degree of elaboration is our criterion; it is on account of the appearance of such a development in the Panagia Lykodemou that I would place it after and not before the other church. Where the single frieze passes across the east end the Cufic pattern is achieved by a different process. The units of the design are no longer separate pieces cut to shape and embedded in the mortar. Instead, the design is drawn on a terracotta panel and the background excavated; the panel is then built into the wall so that the surface

[1] S. and B., pl. 11.

[2] H. Apostoloi: pl. 30, no. 19; Theotokos: S. and B., pl. 11, line 6, No. 7; Panagia Lykodemou: Lampakis, *Daphni*, 84, no. 6; *Mémoire*, fig. 69. It will be seen that the motif is formed by the opposition of two identical characters; this symmetrical reduplication is typical of the Cufic inscriptions which served as models for this style of ornament.

[3] S. and B., pl. 11, line 1. [4] *Ibid.* line 3. [5] *Ibid.* line 2.

is flush with the masonry and finally the background is filled with mortar. Each panel comprises a pair of Cufic characters opposed and elaborated. In part this frieze across the east end maintains the motif of that on the north side,[1] but together with it a new design is found which accords more rationally with the rectangular shape from which it is cut.[2] That this *champlevé* process was a development of the other can hardly be doubted; by it the effect of the complicated embedding method is reproduced, but with greater economy of labour and added coherence of design.

The absence of this technique from the Theotokos leaves little doubt that it was anterior to the Panagia Lykodemou, while its appearance on a church that is demonstrably later serves to confirm this, if confirmation is needed. The three friezes across the gables of the church of H. Theodoroi in Athens (1065) provide this significant example of the *champlevé* process at a later date. Stylistically the connection with the Lykodemou frieze is not very close, for the examples at H. Theodoroi are rows of independent panels rather than continuous friezes and again their designs include in addition to Cufic both animal and purely ornamental motifs.[3] The similar frieze on the west gable of the Lykodemou church[4] is a modern fabrication as is the gable itself, which is not shown on Couchaud's elevation.[5] The panel friezes of H. Theodoroi, which are I believe unique, belong more properly to the province of sculpture than to that of brickwork. In this connection it is noteworthy that the *champlevé* technique was one of the characteristics of contemporary carved ornament, and that here too the Cufic element was prominent.[6]

Disappearance of Cufic Patterns. The florid manner in vogue in the first half of the eleventh century characterised by the multiplicity of brick ornaments is followed by a very marked reaction. The intricate patterns which separate the stones give place to a simple vertical tile and the façade acquires a new austerity. The change was evidently not a sudden one but gradual. Even in the Panagia Lykodemou there are certain sober tendencies which are lacking both in the H. Apostoloi and the Theotokos of Hosios Loukas; thus the simple vertical tile is already fairly frequent,

[1] Lampakis, *Daphni*, 85, nos. 9 and 10; *Mémoire*, figs. 72 and 73.

[2] Lampakis, *Daphni*, 86, nos. 17 and 18; *Memoire*, figs. 74 and 75. Lampakis' figures are inaccurate in some details; the same *champlevé* frieze has been reproduced, but no more correctly, in Castellazzi, *op. cit.* pl. 41, 2.

[3] Soteriou, *loc. cit.* fig. 41; Εὑρετήριον, I, fig. 64. The Cufic panels have lately been deciphered; the readings have not yet been published but, as might be expected, their message is Mohammedan rather than Christian in spirit. Here is another convincing proof of the presence of Arab craftsmen in Athens.

[4] Castellazzi, *op. cit.* pl. 42, 3; Millet, *op. cit.* fig. 105; Lampakis, *Mémoire*, fig. 88.

[5] *Op. cit.* pl. 11, 1.

[6] Cf. the marble string-courses at Daphni: Millet, *Daphni*, fig. 36.

though the pattern is more usual.[1] Another Athenian church, H. Aikaterine[2] illustrates the more general use of the single tile and thus appears to be later in date. In the masonry of the south gable out of a total of sixteen vertical joints only nine contain patterns (pl. 27, 1); in design these are similar to nos. 4, 8, 17, 22 and 33 of pl. 30. In the Kapnikarea the single tile is the rule. Here there are only six patterns still exposed, two in the south gable (fig. 2, B) and two above (fig. 2, A) and two below the central apse window. The later Exo-narthex at the west and the Parekklesion on the north doubtless conceal others, but in all there were probably less than a dozen. This church falls into the gap between the early group and H. Theodoroi (1065), where there is not a single pattern.

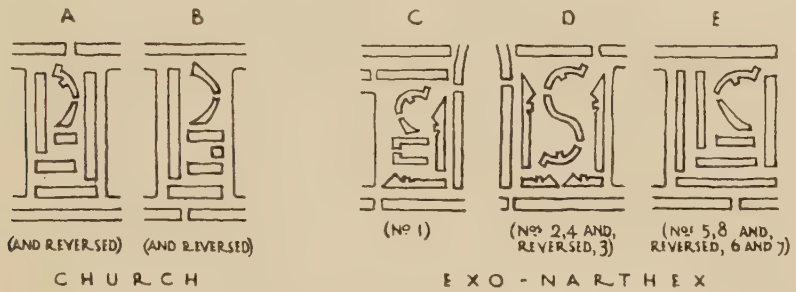

FIG. 2.—ATHENS, KAPNIKAREA, BRICK PATTERNS. THOSE FROM THE EXO-NARTHEX ARE NUMBERED IN SEQUENCE FROM THE LEFT. (Scale 1 : 15.)

In view of the erection of the Panagia Lykodemou before 1044, H. Aikaterine, though evidently later, probably also belongs to the first half of the eleventh century. If the Kapnikarea church is placed about 1050 this leaves an appropriate interval of fifteen years before the dated H. Theodoroi. Daphni, of which Millet has said 'la décoration des façades est d'une extrême sobriété,' like H. Theodoroi has no patterns and naturally falls after rather than before it.

With regard to the Exo-narthex of the Kapnikarea church, it is plainly later than the church proper,[3] but at the same time earlier than the South

[1] In the restoration of this church during the last century the western part was refaced without patterns. The original masonry is visible only at the east and in the lower courses of the lateral façades. A(ntonin) evidently saw the church before it was restored, for in illustrating the north Narthex door he shows a pattern in practically every joint of the surrounding masonry where now there is none (*op. cit.* fig. 15).

[2] Near the Monument of Lysikrates. The plan is of the tetrastyle type (Εὑρετήριον, I, fig. 108). The east end has been plastered and a modern aisle encloses the other three façades so that only in the gables is the masonry exposed.

[3] The masonry of the church ends abruptly a little to the east of the South Porch; that of the Exo-narthex does not bond with it.

Porch,[1] whose resemblance to the porches of the twelfth-century churches in Argolis has been noticed.[2] It has eight patterns on its west façade and these argue for a date prior to H. Theodoroi and Daphni which have none. Again, an examination of these patterns reveals such close affinity with those of the church that they cannot have been set much later. No. 1, from the left of the façade (fig. 2, C) reproduces the figure used in the south gable of the church (fig. 2, B), nos. 5–8 (fig. 2, E) those in the apse (fig. 2, A). Further, the curious ϵ-shaped unit found in the patterns of the apse, which to my knowledge occurs in no previous church, is used in every one of the Exo-narthex patterns.

Survivals of Cufic Patterns. Outside Athens the tradition of brick designs seems to have survived rather later. The church at Chonika which Struck has judged to be the earliest of the Argive group has four patterns interspersed in its masonry (pl. 30, 42–45). By these it is to be connected with the eleventh-century Athenian series in contradistinction to the neighbouring churches at Plataniti, Hagia Mone and Merbaka which can none of them boast a single example. At Chonika the patterns are no longer a dominant feature in the decorative schemes and unlike those at the Kapnikarea church are not arranged symmetrically above the windows. Instead they only appear where a single tile would be inadequate filling for the occasionally wide intervals in the masonry. Thus Chonika is at once earlier than the other Argive churches and later than the latest in Athens where Cufic patterns are used.

To the four churches published by Struck must be added another: H. Ioannes at Ligourio west of Epidaurus.[3] Here are four patterns, three on the north and one on the south façade (fig. 3), and the church must on their account be grouped with Chonika rather than the others. As at Chonika the patterns on the north façade, while approximating to Cufic figures, introduce features in the cutting which are unknown in the eleventh-century Athenian examples.

Ligourio and Chonika must be close in date on account of other features they have in common; both provide important examples of the survival of the Cufic frieze. At Chonika [4] the embedding process is used in a compact design which reproduces the motif of the Panagia Lykodemou

[1] The ill-adjustment of its masonry to that of the Exo-narthex is plainly visible on the building itself and distinguishable on the published photographs: Struck, *Athen u. Attika*, fig. 173; Millet, *L'École Grecque*, fig. 75: Εὑρετήριον, I, fig. 55.

[2] Millet, *op. cit.* 125; Xyngopoulos, Εὑρετήριον, I, 71.

[3] At the east end of the village towards the hamlet Koroni. The plan has been published by Monneret de Villard (*Inedita byzantina* (*Monitore Tecnico*, XVIII 1912), 431, fig. 4, whence Millet, *op. cit.* fig. 139) with the title Koroni. Millet by discussing and indexing the church under two names—Ligourio and Koroni—gives the impression that there are two churches where in fact there is only one.

[4] Millet, *op. cit.* fig. 115, *c*.

(fig. 1) with the U-shaped feature reduced to a single unit. The frieze is not continuous and the figure is repeated only two or three times on either side of the three doors. In the Ligourio church [1] the same technique is employed in a less elaborate frieze (fig. 3). In both friezes each repeat of the motif is separated from its neighbour by a pair of cut vertical units, a feature unknown to the Athenian tradition of the eleventh century. Indeed, these tentative friezes, which extend for little more than a metre in each case, are less a continuation of that tradition than a later imitation of it.

In the north, the church of H. Soter at Amphissa provides parallel examples of the survival of Cufic patterns in a debased form. They are used in the filling of the tympanum of the north gable archivolt.[2] The

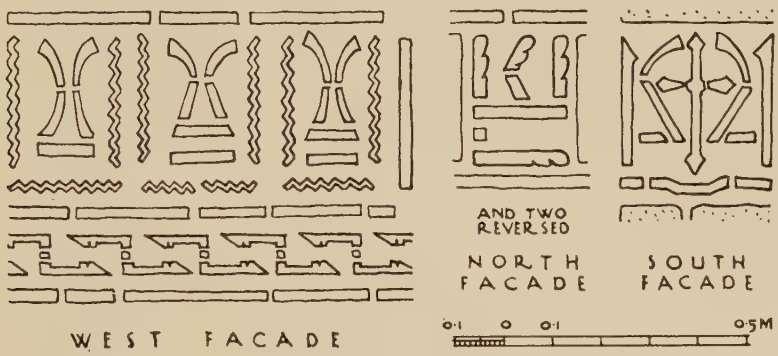

Fig. 3.—Ligourio, Brick Patterns. (Scale 1 : 15.)

double figure enclosing a cross also occurs once in each of the attached piers which support this and the corresponding archivolt on the south façade (pl. 30, 56). It derives ultimately from a pattern that is found both at the Katholikon of Hosios Loukas (pl. 30, 54) and the H. Apostoloi (pl. 30, 4). But the repetition of the cut vertical member found at Ligourio shews that this church belongs to the later group.

III. Greek Characters.

In a small number of churches a type of pattern appears in the mortar interspace which bears no relation to Cufic but instead reproduces characters of the Greek alphabet. The most important of these is the Panagia Katholike at Gastoune in Elis,[3] where in the lower courses of the north

[1] West façade, actually the inner wall of the Narthex which is a later addition and whose north wall partly obscures the frieze.

[2] Millet, *op. cit.* fig. 115, *a.*

[3] Published by Traquair, *Frankish Architecture in Greece* (*Journal Royal Inst. of British Architects*, XXXI, 1923–24), 80 ff. For the brickwork fig. 31; cf. Millet, *op. cit.* fig. 114, *c.*

façade there are about a dozen different patterns. The following letters occur: H, N, Π, T, X; in none of them is there any attempt to elaborate the units by cutting. In the other examples which Millet cites,[1] unpublished with the exception of one in Laconia,[2] the same letters are found.

For the majority of these Greek characters no reasonable christological interpretation has been found. Bearing in mind that the Cufic designs are purely ornamental and, with the single exception of the panels at H. Theodoroi, cannot be read, it would appear that the selection of the Greek characters was equally arbitrary. The mason was evidently determined in his choice by such considerations as the size and shape of the space to be filled.

A closer examination of the patterns from the churches that have been already considered reveals that some at least belong to this series rather than to the Cufic. The K-figure which occurs both at the Katholikon of Hosios Loukas and in the later examples is as much Greek as Cufic. In addition, among the designs of the Apostles' church one may distinguish A (Pl. 30, 16), I (3, 17), O (8), Π (2) and X (5); of the Theotokos patterns at least one is interpretable in Greek characters.[3]

The examples of this class of decoration are comparatively rare and it would be rash to draw from them any conclusions for dating even when the closest parallels are found. Their wide distribution presents an interesting problem which will be discussed very briefly. The appearance at Athens of Greek characters among the Cufic suggests that they are survivals of a time when they alone were used but of which no monuments remain. The other churches where this type is still to be seen are widely distributed in Elis and Laconia, Triphylia and Aetolia, so that they can hardly be considered collectively to constitute a single school. It is more reasonable to suppose that they represent a tradition which was at one time common to the whole of Greece. Patterns of this class are frequent in the eleventh-century churches of Kastoria and have been recorded elsewhere in Macedonia.[4] It is not within the scope of the present study to relate these examples to the Greek School, but they may be mentioned in passing as confirmation of the suggestion that this style of brick decoration was at one time generally employed throughout the Greek peninsula. In Athens that tradition was almost completely supplanted by the Cufic figures. This new style spread to Argolis and to Phocis before it in turn gave place to a more austere technique.

[1] *École grecque*, 257.

[2] Lampakis, *Mémoire*, fig. 80.

[3] S. and B., pl. 11, line 6, no. 2. It seems to be a combination of κ and ω and differs from its neighbours in the simple un-cut units of which it is composed.

[4] Millet, *op. cit.* 253[1].

In this view the late date of Gastoune [1] presents no difficulty. By the absence of Cufic motifs we may judge that the west Peloponnese was independent of Athenian influence during the eleventh century and would therefore retain in the twelfth the Greek characters of an earlier period.

IV. Christological.

This group, the starting-point of Lampakis' unavailing research, though much smaller than he imagined, must not be altogether ignored. The cross pattern at Gastoune which both Millet and Traquair reproduce is identical to one of those of the Panagia Lykodemou.[2] A second cross motif from the latter church [3] is paralleled in Athens itself at the H. Apostoloi (pl. 30, 18) and is closely related to those at Chonika (pl. 30, 45) and Merbaka.[4] Yet another type is found in the north gable at Amphissa; it is repeated elsewhere in the same church in the piers which support the gable arches (pl. 30, 56). The great similarity between this pattern and that in the south façade of the Ligourio church (fig. 3) cannot be entirely fortuitous. The two churches must be close in date.

The cross patterns are the most frequent of those which can be placed in this class; after the disappearance of the brick patterns from the masonry they were often retained as a feature in the ornamentation of window tympana (cf. *infra*, p. 126). Lampakis related the two star-shaped figures of the Panagia Lykodemou [5] to passages in the Apocalypse; [6] without questioning this interpretation one may compare analogous patterns on a larger scale at Gastoune (pl. 29. 3) and Merbaka.[7] Finally, the interpretation of the H. Apostoloi pattern no. 16 as 'Alpha and Omega' is not unreasonable; it is, I believe, unique.

In a single church there are seldom more than one or two of these christological patterns and the group as a whole is small. The churches in which they are found are more safely dated by other considerations. Their wide distribution is significant and rather confirms my hypothesis that before the use of Cufic a single style obtained throughout Greece.

[1] The church has features which connect it very closely with the twelfth-century Argive group (cf. *infra*, p. 127). Millet suggests that these are later additions (*op. cit.* 210[4]), but a careful inspection has revealed to me nothing to support this hypothesis. The whole of the church proper is without question of one period. The Exo-narthex alone is later, as has been indicated on both the published plans: Monneret de Villard, *op. cit.* 432, fig. 7, whence Millet, *op. cit.* fig. 141; Traquair, *op. cit.* fig. 29.

[2] Lampakis, *Daphni*, 87, no. 20; *Mémoire*, fig. 76.

[3] *Daphni*, 87, no. 21; *Mémoire*, fig. 77.

[4] Struck, *Vier Byz. Kirchen der Argolis*, 207, fig. 2, *d.*

[5] *Daphni*, 85, nos. 11 and 12.

[6] I, 16 and XXII, 16.

[7] Millet, *op. cit.* fig. 118.

V. Ornamental.

In the Cufic sequence the patterns of the Kapnikarea Exo-narthex were shown to be the latest examples in Athens. Among them nos. 2–4 (fig. 2, D) strike a discordant note; for though the same cut-brick units are used as in the others, here they form an S-figure which has little connection with Cufic characters. In those churches outside Athens where the pattern technique seems to have survived later, non-Cufic designs predominate. The S-figure of the Kapnikarea Exo-narthex is repeated at Chonika (pl. 30, 44) and recalled in a pattern at Amphissa (pl. 30, 55). The seven patterns on the apse of the Amphissa church repeat the three designs illustrated in pl. 30, 55, 57, 58. No Cufic prototypes can be found for these: they are purely ornamental.

The brick figures of Ligourio, Chonika and Amphissa are distinguished from the examples of the eleventh century by a departure from the Cufic types, by increased skill in cutting and by the use of very small units.[1] Indeed the cut brickwork of the three churches is so similar both in style and technique that though far apart these churches must have been approximately contemporary. In view of the complete absence of patterns from the dated Hagia Mone they may not be placed after 1150. On the other hand, differences of design and technique distinguish this group from the eleventh-century examples and it must in consequence belong, if not to the last years of that century, then to the beginning of the twelfth.

§ 3. Vertical Tiles.

Single Tiles.

It has already been shown that in the Athenian area the first half of the eleventh century witnessed the greatest use of brick patterns, the second half their gradual disappearance. Single vertical tiles take their place, not through any lack of enterprise but evidently owing to a desire for an unbroken and a more dignified façade. At Daphni the pursuit of sobriety is continued by the frequent omission of the vertical tile;[2] this has been noted as an outstanding feature of Kaisariane, where the vertical tiles appear even less frequently.[3] The two churches on this account appear to be approximately contemporary and Kaisariane probably the later of the two. The climax of this tendency, the wall entirely without brick, was reached in H. Nikolaos sta Kampia and again in the Panagia Gorgoepekoös (Little

[1] A comparison of the patterns from the Katholikon of Hosios Loukas and the Amphissa church is sufficient to illustrate the progress in this last respect.

[2] On the north façade between the arch which marks the transept and the east end, out of a total of 59 vertical joints I counted 31 made without tiles.

[3] Millet, *op. cit.* 228.

Metropolis), but to my knowledge nowhere else. This suggests, but does not prove, the contemporaneity of these two churches.

Elsewhere, and throughout the twelfth century the brick was retained; it was, in fact, a structural necessity as a bond between the facing and the rubble core.[1] In a number of small and unpretentious churches the rubble was not faced at all; but where a more distinguished finish was required the *cloisonné* manner was used, and with relentless regularity. The single vertical tile is the rule in the latest Attic examples such as the Omorphe Ekklesia; the Argive churches, including Merbaka, the most elaborate, do not depart from it. Only in Elis is any variation found; at Vlachernai the vertical joints comprise two tiles in each case,[2] and at Gastoune, where the patterns are wanting, two tiles or even three take their place (pl. 29, 3).

Cut Vertical Tiles.

The cut-brick patterns never returned to favour, but their technique is retained in a final refinement of the *cloisonné* system, viz. the shaping of the

Fig. 4.—Cut Vertical Tiles. (Scale 1 : 15.)

vertical tile by cutting. This process is used extensively in only two churches, Merbaka [3] and Vlachernai, where the cut tiles like the others are found in pairs.[4] The technique is not, however, limited to the Peloponnese, though elsewhere it is found less frequently.

In Athens itself a small church of H. Ioannes Theologos provides the only surviving example: three tiles in the north gable all of one pattern (fig. 4, 3). In Attica they are not uncommon, being found at the Omorphe Ekklesia [5] (fig. 4, 1), Hosios Meletios and a church at Kalyvia Kouvara in the Mesogeia.[6] But only at Sagmata is the detailed cutting of Merbaka

[1] Choisy, *op. cit.* 12.
[2] Orlandos, Αἱ Βλαχέρναι τῆς Ἠλείας, Ἐφημ. 1923, 22, fig. 36.
[3] Millet, *op. cit.* fig. 119, *e*.
[4] Traquair, *loc. cit.* fig. 26.
[5] Three tiles all of the same pattern; two of these are used in horizontal courses.
[6] H. Petros; cf. Orlandos, Ναοὶ τῶν καλυβίων Κουβαρᾶ (Ἀθηνά, XXXV), 183, fig. 13.

approached; here a single design is repeated three times in the top course of the central apse (fig. 4, 7). These churches must be fairly close in date and can only be placed in the twelfth century owing to the absence of this treatment in others which are unquestionably of the eleventh.

Similar cut units are often found in conjunction with the latest examples of Cufic patterns. The sinuous figure found at Vlachernai (fig. 4, 10), and, in a more rudimentary form, at the Athenian church (fig. 4, 3), is frequent both at Amphissa [1] and Ligourio (fig. 3) and is heralded much earlier in two of the patterns from the Kapnikarea Exo-narthex: nos. 2 and 3 (pl. 31, 2).[2] At Ligourio there are in addition several cut tiles isolated in the masonry as in the later churches; two in the south façade are of the type illustrated in fig. 4, 3 and a few others in the south-west face of the dome are of the bead and reel (as in figs. 4, 6) and zigzag (as in fig. 3) types. At the Chonika church the vertical members of the Cufic frieze [3] are cut to a pattern closely allied to the bead and reel type of Merbaka and almost identical to that from Sagmata. Ligourio, Chonika and Amphissa constitute a small group which is related both to the earlier period of elaborate brick designs and to the other, evidently later, when a single cut tile remains to represent the former pattern. They mark a transitional stage and establish the chronological continuity of the brick-cutting technique through the two centuries, a continuity which is only broken for a short time in the immediate neighbourhood of Athens by a very evident desire for simplicity in the façade. It has already been seen that these three buildings of the transitional stage must by the style of their patterns be placed in the last years of the eleventh or the first of the twelfth century. The later group: Sagmata, Omorphe,[4] Vlachernai and Merbaka where

[1] Millet, *op. cit.* fig. 115, *a*; cf. pl. 30, 56.

[2] A(ntonin) figures a similar tile among the Lykodemou patterns (*op. cit.* fig. 13, line 2, 2) and in position by the north Narthex door (fig. 15).

[3] Millet, *op. cit.* fig. 115, *c*; incorrectly illustrated by Struck, *loc. cit.* pl. IX, 7.

[4] The Omorphe examples are actually at the south-east corner of the Parekklesion (Orlandos, Ἡ Ὄμορφη Ἐκκλησία, fig. 5) and do not necessarily prove a twelfth-century date for the whole building. Orlandos dates the church proper in the eleventh century and maintains that the Parekklesion was a later addition. Apart from the evidence of the cut brick he points out (p. 41) that the south gable window is in part obscured by the roof of the chapel, and secondly that the window in the south wall of the S.W. angle compartment now opens, not to the outer air, but into the Parekklesion (for plan, fig 4; cf. fig. 14). To my mind neither of these arguments is valid. In the first case the gable window is not obscured by the original chapel roof but by that which, as Orlandos admits (p. 42), is a repair dating from the Frankish occupation. With regard to the other window it need only be said that in other churches of this size and type, unencumbered with Parekklesia, windows in this position are rare and it should be noted that at the corresponding point on the north side of the church, the wall is not pierced. The window has plainly been introduced to provide additional communication between chapel and church. Further, the masonry of the east end is uniform throughout and there is no break in its continuity at the point of junction (fig. 7). The Parekklesion window is arched in stone

patterns are wanting can therefore reasonably be placed in the second half of the same century.

The use of the cut vertical tile in the small church of H. Eleousa at Sykaminon in Attica (fig. 4, 2) confirms the above dating for the heyday of the process, for this church must be dated in the early years of the Frankish occupation. Prior to the recent addition of a compartment to the west the church was entered through a door in the south wall, pointed, moulded and hooded in the Gothic manner.[1] I have examined both the doorway and the masonry round it and have found nothing to suggest that it was a later addition. It should be noted that the doorway is not under the centre of the gable but immediately below the south window, which in every detail reproduces that in the apse (pl. 29, 3) and, secondly, that the doorway could not have been inserted at a later date without disturbing this window. It has not been disturbed. The plan,[2] lacking the niches which do duty for Parabemata in the smaller Greek churches, does not exclude the possibility that the building was erected by Greek masons as the private chapel of some Frankish lord. The doorway and the absence of niches are the only foreign features. The cut tile here illustrated is in the masonry of the apse.

§ 4. Horizontal Courses.

I. Tile-Courses.

So far the discussion of the variations in the *cloisonné* system has been confined to the vertical unit; it now remains to examine the development of the horizontal member of the *cloison.*

The unequal masonry of the Katholikon of Hosios Loukas has not allowed an even coursing of the tiles. In places a single row divides the stonework, while in others three or even four are used. On the apse, where alone the masonry is regular, a double course is the rule. The Theotokos church shews four tiles in each course throughout. In the H. Apostoloi at Athens, though at the base of the wall single brick courses are found, the double row is more frequent and is employed exclusively in the upper courses. The treatment of the Panagia Lykodemou is identical in this respect: below the Cufic frieze single courses, above double (pl. 31, 4).

The grouping together of these four churches put forward on the grounds of their common use of Cufic patterns is again demanded by the

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and identical to that of the Prothesis, and like the Bema window it has a bowl built in above it. These considerations combine to prove that the church proper is contemporary with the chapel and therefore dates, on the evidence of the cut tiles, from the second half of the twelfth century.

[1] Orlandos, Μεσαιωνικὰ μνημεῖα Ὀρωποῦ καὶ Συκαμίνου (Δελτ. Χριστ. Ἀρχ. Ἑτ. IV, 1927), 25 ff., fig. 16.

[2] *Ibid.* 43, fig. 17.

multiplication of the horizontal tile-course which is found in each. In contrast, all the other churches of the series count only a single row of tiles in each course. The ambitious Daphni as well as the smaller churches in Athens, Sagmata in the north, and in the south the whole Argive group, all maintain this simplest system. But again Gastoune and Vlachernai [1] are thrown together as the two exceptions; in both the double tile-course is the rule (pl. 29, 3).

II. Dentil Courses (cordons de dents).

This feature, which is peculiar to the Greek school and does not appear in Constantinople, has received Millet's closest attention.[2] He makes a strong case for an oriental origin of the process and analyses in detail its use in the Greek churches. Appearing as surrounds to doors and windows, emphasising eaves and verges, and stratifying the façade, the brick dentils do duty for the mouldings of a stone architecture. Their structure [3] admits of little variation and conclusions for chronology are limited to such as can be drawn from a consideration of the position in which they are used and the frequence of their appearance in the façade.

The feature was already a part of the Greek tradition when the Katholikon of Hosios Loukas was built; the earliest example of its use, at Skripou, is more than a century earlier. On the east end twin dentils mark the summits of the two storeys and the lowest of the four is continued on the south front.[4] The climax of the Cufic-pattern style is accompanied by the greatest use of the brick dentil and both fall easily into the first half of the eleventh century. At the church of the H. Apostoloi the window arch springings are linked by a dentil and above this level to the top of the façade every second course contains one.[5] On the Theotokos at Hosios Loukas there are nine, one in each course above window level.[6] The more austere façades of the second half of the eleventh century mark a decline. At the Kapnikarea church there are two on the central apse, elsewhere only one (pl. 27, 2); at H. Theodoroi if we except those enclosing the inscriptions and friezes in the gables we can count one only; [7] at Daphni also there is only one, at cill level.[8] The Panagia Lykodemou having three, one under the eaves and two at window level, marks the transition. The climax of austerity is emphasised by the absence of dentil courses. On two churches they do not occur at all: Ioannes Kynegos (pl. 28, 2) and Sagmata (pl. 29, 1). With these must be grouped Kaisariane and H. Nikolaos sta Kampia,

[1] Orlandos, Ἐφημ. 1923, 22, fig. 36. [2] *Op. cit.* 268 ff. [3] S. and B., fig. 14.
[4] *Ibid.* pls. 9 and 8, whence Wulff, *Hosios Lukas*, fig. 4; cf. Diehl, *op. cit.* 15.
[5] Five in all; Rivoira, *Lombardic Architecture* (London, 1910), I, fig. 262; Struck, *Athen u. Attika*, fig. 164; Strzygowski, *Die Baukunst der Armenier*, II, fig. 721; Εὑρετήριον, I, fig. 73.
[6] S. and B., pl. 9. [7] For illustrations *v. infra*, p. 117[1]. [8] Millet, *Daphni*, pl. V.

where they appear only under the eaves of the dome, and Plataniti, where a dentil is used as a surround to the Bema window, but nowhere else.

With regard to the position of the feature, it should be noted that the dentil surround to the apse windows of the Theotokos church, H. Apostoloi, and the Kapnikarea follows the arch of the windows only and continues round the façade from the springing-point without extending below it. At H. Theodoroi on the parabemata at least the dentil extends rather lower,[1] while throughout Daphni and at Ligourio in the south gable the dentils reach the bottom of the window. This sequence should be borne in mind when dating the churches. At Ligourio the dentil of the apse window is of the less developed type, suggesting that this church is the earliest of the Argive group, for in the other churches the dentils extend to cill level in every case, as at Daphni.

With the appearance of new motifs on the apse the dentil course returns to emphasise them, first at Daphni,[2] later at Hagia Mone (pl. 28, 3) and Merbaka and accompanies them when they spread to the lateral façades, yet without ever approaching the multiplicity of the early eleventh-century examples. Vlachernai and Merbaka, dated by their cut vertical tiles in the second half of the twelfth century, follow the example of Daphni in having a single dentil course at cill level. To this late group must be added Gastoune, where, window surrounds excepted, the cill dentil as in the other churches is the only one (pl. 29, 3).

III. Cufic Friezes. V. Supra, pp. 105–109.

IV. Greek Frets.

The motif first appears, tentative and small, at Hosios Loukas on either side of the apse of the Katholikon.[3] Later, at Daphni, it takes a prominent place in the design, crowning the central apse.[4] This competent example of brick ornament must have had other antecedents in addition to that at Hosios Loukas; none, however, survives in the neighbourhood.

The feature was adopted and developed in Argolis in the twelfth century at Hagia Mone and Merbaka. It does not appear in Ligourio, Chonika and Plantaniti, apparently the earliest churches of the group; of these the first two, though later than Daphni, seem in their Cufic friezes to reproduce earlier models, while Plataniti is small and unpretentious. The example of Daphni is felt only in the later churches. Hagia Mone in the middle of the century adds to the main fret a smaller one below it, but only

[1] Cf. various views of the east end: Couchaud, *op. cit.* pl. 4; Castellazzi, *op. cit.* pl. 4; Rivoira, *op. cit.* I, fig. 36, *Le Origini dell' Architettura* Lombarda[2] (Milan, 1908), fig. 27; Diehl, *Manuel*[1] (1910), fig. 212; *ibid.*[2] (1925), fig. 220; Struck, *op. cit.* fig. 168; Εὑρετήριον I, fig. 61.

[2] Millet, *Daphni*, pl. V. [3] S. and B., pl. 9. [4] Millet, *op. cit.* fig. 27.

on the central face of the apse (pl. 28, 3). At Merbaka there is further development, the secondary fret being enlarged and extended to the lateral faces of the apse.[1] This elaboration suggests that Merbaka is the later of the two and dates from the second half of the century. In both churches a single fret is carried round the lateral and west façades (pl. 28, 4). Gastoune provides a final example which connects it with the later of the Argive series. This is in a short frieze above the now walled-up south door; it is of the simplest form and exactly reproduces the figure of the lower fret at Hagia Mone (pl. 29, 2).

V. Cut-brick Friezes.

Alternatively to the brick dentil, and like it ultimately performing the architectural function of a moulding, a shallow cut-brick frieze is used. Between two courses of tiles the cut units are embedded in single or double rows in the flush mortar. These friezes are a characteristic feature of the Argolis churches and occur in all those to which I have referred with the exception of the very small Plataniti. The commonest motif is a step pattern; two parallel rows of tiles have their ends connected by a small brick fragment or by a cement of powdered brick before the mortar is finally pointed.

The motif occurs in its simplest form in Athens on the Kapnikarea church in a horizontal frieze immediately above the arch of the central south door (fig. 5, A). The unit here used is found in the earlier Panagia Lykodemou in the Cufic ornament above the Bema window (pl. 31, 4). The Kapnikarea frieze is exactly repeated in the Exo-narthex of the same church in the spandrels of the lower windows. Here is further proof that the original church and the addition are not only close, but very close in date. With the Kapnikarea friezes may be compared that formerly above the north gable window of the church at Aulis in Boeotia.[2] As at the Kapnikarea the importance of this frieze in the decorative scheme is small.

At Ligourio (fig. 5, B) and Chonika[3] (fig. 5, C) the step-pattern is associated with a Cufic frieze and the characteristic beak of the Cufic figures is introduced. Hagia Mone repeats the Chonika step-pattern but geometricises the units which compose it (fig. 5, D). In the Merbaka frieze (fig. 5, E) the step figure is lost, though the same unit is retained in the

[1] Millet, *op. cit.* fig. 118.

[2] Lampakis phot. 1846. This fine church was demolished and replaced by a wooden-roofed chapel in 1914. The large and equally spaced windows recall Daphni; the masonry, though like Daphni in having no brick patterns, is less regular, which suggests a somewhat earlier date. Lampakis' photograph has been published by Mme. Sotiriou (Ἐφημ. 1931, 138, fig. 15), who proposes another limit for the dating of the church: 'not earlier than the beginning of the eleventh century.'

[3] Struck, *Vier Byz. Kirchen der Argolis*, pl. IX, 7; Millet, *op. cit.* fig. 115, *c*.

upper of the two rows. Unlike the other examples, the units of both rows here point in the same direction.[1] These departures suggest a later date, and other differences point to the same conclusion. At Chonika [2] and Hagia Mone [3] the cut frieze is used to emphasise the cill moulding of the east end; at Merbaka it does not occur at this point. Again, while the two former maintain a single design throughout, at Merbaka a second pattern is introduced (fig. 5, F). This *disepsilon* figure recurs at Vlachernai,[4] as does the stepped frieze (fig. 5, G). In addition at Vlachernai there is a simpler zigzag pattern formed of a continuous row of single tiles (fig. 5, H). The friezes of this church exactly reproduce the cutting of a vertical tile frequent

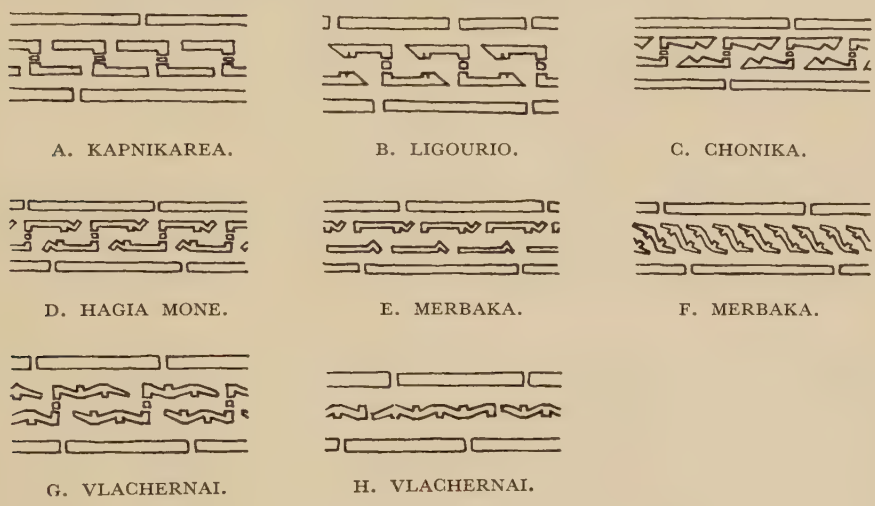

FIG. 5.—CUT-BRICK FRIEZES. (Scale 1 : 15.)

at Merbaka (fig. 4, 4) and thus illustrate at once the unity of the cut work whether in vertical or horizontal joints and the contemporaneity of the two churches.

In Athens no example of the cut frieze survives apart from those of the Kapnikarea church, but Couchaud recorded two in the dome of the Megale Panagia, demolished in 1885 to facilitate the excavation of the Stoa of Hadrian. The detail which he published [5] shews the dome archivolts springing from a cut-brick frieze of the simplest zigzag pattern, similar to fig. 5, H but without the protrusions in the re-entrant angles. The second

[1] The mortar is of inferior quality and has so disintegrated that it is impossible to discover if the two rows were connected by smaller fragments or not.

[2] Struck, *op. cit.* pls. VII, 1, IX, 6.

[3] *Ibid.* pl. XI, 5; cf. Diehl, *op. cit.*[1] (1910), fig. 210; *ibid.*[2] (1925), fig. 218.

[4] Orlandos, 'Εφημ. 1923, 22 fig. 34; Millet, *op. cit.* fig. 119, *c.*

[5] *Op. cit.* pl. 3, 4.

example is used as a surround to each of the window arches. In this case the units seem to be of the *disepsilon* form and their position recalls the similar frieze at Merbaka which arches over the east windows.[1] The cut friezes at Hosios Meletios can only be mentioned here; their study will facilitate the dating of the building they adorn.

In the Kapnikarea church, Ligourio and Chonika the motif is tentatively used, the frieze extending for not more than a distance of two or three feet in each case; this suggests a relatively early date. In Hagia Mone, Merbaka and Vlachernai it is used systematically throughout the building. At the small church of H. Eleousa at Sykaminon, which as we have seen (p. 115) belongs to the early years of the Frankish occupation, there is a cut-brick frieze of the *disepsilon* type on the apse (pl. 29, 4). We must conclude that the cut-frieze was a characteristic of the Attic tradition at the close of the Middle-Byzantine period.

§ 5. Window Design.

A short examination of the developments in window design will serve to check the conclusions which have already been reached, and will in some cases permit their further definition.

I. Form.

1. *Arcade Type.* Each light of a double or triple window is arched separately in brick. The type recalls the window arcades of Early Christian basilicas,[2] while the use of similar windows at Skripou [3] establishes the continuity of the tradition. There are notable examples in the Katholikon of Hosios Loukas in the lower series of the east end.[4] This type is used exclusively in the H. Apostoloi at Athens,[5] while in the Theotokos of Hosios Loukas is departed from only in the dome.[6] In two other churches the arcade window is used, but in conjunction with other forms. The Panagia Lykodemou follows this type only in the windows of the west front [7] and some of those of the lateral façades; [8] Kapnikarea only in the east windows (pl. 27, 2). At H. Theodoroi and Daphni this form is not used at all.

The arcade type seems to have been in greatest use during the early

[1] Millet, *op. cit.* fig. 118.

[2] *E.g.* Panagia Acheiropoietos (Eski Djouma), Thessalonika; see Diehl, Le Tourneau et Saladin, *Monuments chrétiens de Thessalonique*, pl. IV.

[3] See my drawing in Ἐφημ. 1931, 124, fig. 5.

[4] S. and B., pl. 9.

[5] Three-light window in the Bema, two lights elsewhere; for illustrations *v. supra*, p. 116[5].

[6] S. and B., pls. 9, 10.

[7] Couchaud, *op. cit.* pl. 11, 1, whence Εὑρετήριον, I, fig. 79.

[8] North façade (five windows, four of arcade type): Couchaud, *op. cit.* pl. 12, 1, whence Wulff, *Hosios Lukas*, fig. 10, and Εὑρετήριον, I, fig. 82. South façade (six windows, five of arcade type): Rivoira, *Lombardic Architecture*[1] (1910), I, fig. 279.

years of the eleventh century, but towards its close it tended to disappear. It is only reasonable to suppose that its disappearance was gradual. This is very well illustrated in the buildings themselves if the above sequence is retained (Apostoloi- Theotokos- Lykodemou- Kapnikarea- H. Theodoroi-Daphni), and there is thus good reason for retaining it.

Occasionally in small churches of later date where the more elaborate forms were out of the question the arcade window survives.[1] The use of this type is not, of course, in itself sufficient evidence for dating a church in the first half of the eleventh century; though the broad apse window of three equal lights does not seem to have outlived that period by many years.

2. *Grouped Type.* The whole window is embraced in a single arch within which the individual lights are arched separately. In origin the surrounding arch was probably structural, but ultimately the grouped window became primarily a decorative feature and assumed an æsthetic function which the severely utilitarian openings of the arcade type could not attempt. Both double- and triple-light windows are found, but there is no need to draw a distinction between them as the difference is one of scale, not style.

The grouped window appears evidently for the first time in the Katholikon of Hosios Loukas in conjunction with features which Millet recognises as characteristically Constantinopolitan,[2] and one might suspect that the surrounding arch was also an importation. The grouped window seems, however, to be an innovation of the Greek school, for neither in the capital nor in Thessalonika is there a single example demonstrably earlier than the Katholikon. The example of this church is not followed in the Theotokos save in the dome, not at all in the H. Apostoloi. The introduction of the surrounding arch at the Katholikon is undoubtedly to be explained on structural grounds. The windows are unusually broad and the arch was introduced to relieve them of the weight of wall above by deflecting it to either side. The absence of the grouped window at the H. Apostoloi and the Theotokos is thus satisfactorily explained by their smaller scale.

The Panagia Lykodemou seems to mark the general adoption of the

[1] Kaisariane south gable (Strzygowski, Ἐφημ. 1902, figs. 1, 4*a*, whence Wulff, *Altchr. u. Byz. Kunst* II, fig. 358), Ligourio (apse window) and some minor Athenian churches. In all these the windows have two lights, never more. Note too that in certain church annexes, such as the Kapnikarea Exo-narthex, the desire for a more open treatment has resulted in a return to the broad double arcade-window (Couchaud, *op. cit.* pl. 14; Castellazzi, *op. cit.* pl. 71; for other illustrations *v. supra*, p. 108[1]), or, as in the case of the west porch at Hosios Meletios, to the true arcade opening to the ground. But such annexes lie really outside the main current of church-building here examined; they are few in number and presented problems of design not met with in the churches themselves. They have thus an individual quality which contrasts sharply with the peculiar homogeneity of the church series as a whole.

[2] *Op. cit.* 206.

type; in addition to the three east windows, it has further examples on the lateral façades.[1] Here the structural explanation is not so plausible and one may assume direct imitation of the Katholikon windows for æsthetic reasons.[2] Subsequently the grouped window gradually displaced the arcade type; first in the gables of H. Aikaterine (pl. 27, 1) and the Kapnikarea church,[3] which are thus close in date; later at H. Theodoroi[4] and Daphni throughout the whole building. In the twelfth century this type was used almost exclusively.

There is an important development in the form of triple windows. First in the Bema window of the Panagia Lykodemou, following the example of the H. Apostoloi and the Theotokos of Hosios Loukas, the three lights remain of equal height, leaving a large tympanum inside the enclosing arch (pl. 31, 4). At Daphni, however, the central light rises above the others and reaching the crown of the outer arch practically fills the whole tympanum. This form of grouped window is not found in any church which can be proved anterior to Daphni, nor is there any example of the transition from the Lykodemou type. At Daphni the new form is fully developed and used consistently throughout the church,[5] and though one might expect to find tentative examples elsewhere it is not impossible that the innovation dates from this building.

The windows of the twelfth-century churches, whether in brick or stone, double or triple, all with one exception[6] conform in the main lines of their design to the Daphni types.[7] The chronological sequence which I have proposed for these later churches can be only confirmed by considerations of materials and detail.

II. Stone Dressings.

During the course of the twelfth century stone takes the place of brick in window construction. The lines of the brick types are closely followed, large blocks are used and often no attempt is made to accord to the struc-

[1] East windows: Couchaud, *op. cit.* pl. 11, 2; cf. my pl. 31, 4. Lateral façades: *v. supra*, p. 120[8].

[2] The architectonic affinity of the two churches also suggests imitation (Millet, *Daphni*, 53), while the use in some of the windows of the later church of a true column instead of a shaft, a feature rare elsewhere outside the Katholikon, points to the same conclusion.

[3] West gable window: Castellazzi, *op. cit.* pl. 71; Εὑρετήριον, I, fig. 55. South gable window: *v. supra*, p. 108[1].

[4] For illustrations *v. supra*, p. 117[1]. [5] Millet, *Daphni*, fig. 27 and pl. V.

[6] Gastoune; both the Bema window (pl. 29, 3) and that in the south gable (pl. 29, 2) follow the earlier type with three equal lights.

[7] The grouped window with the raised centre light survived the Frankish occupation and was still in use during the sixteenth century to judge by the examples in the Katholikon Exo-narthex at Hosios Loukas, erected in 1582 but removed during the last century: Wulff, *Hosios Lukas*, pl. II, 2; S. and B., fig. 11.

tural lines of voussoirs. The gradual adoption of the stone window-dressings is well illustrated in the Argive churches. At Ligourio there is no stonework, at Chonika and Plataniti it is confined to the Bema window, whereas at Hagia Mone and Merbaka stone dressings are used in all three east windows. In adddition, the entrance doors of the two last churches are framed and arched with marble. Hence it would seem that Ligourio is the earliest of the group, Hagia Mone and Merbaka the latest.

In addition to H. Nikolaos sta Kampia, two other churches have stone dressings in all the windows: Sagmata (pl. 29, 1) and the Omorphe Ekklesia. In the Hagia Mone the brick dressings are displaced only at the east end; on this account Omorphe and Sagmata appear to be later and therefore probably date from the second half of the century. Amphissa, where only the east windows are framed in stone (pl. 28, 1), is certainly anterior to them. None of the surviving Athenian churches has stone or marble window-dressings; but Couchaud in illustrating the dome of the demolished Megale Panagia,[1] where the windows are arched in stone, has shewn that they were not unknown. In Attica they are fairly common; those at Sykaminon (pl. 29, 4) are important owing to the late date of the church.

The moulding of the stone architrave shows little variation. That at H. Nikolaos has been illustrated by Schultz and Barnsley,[2] who noted a close similarity with those at Sagmata.[3] Hagia Mone and the Omorphe Ekklesia show no development in this respect. Merbaka alone departs from the type; the Bema window is covered with a much more elaborate circular moulding which rests at either side on attached colonnettes with capitals and bases.[4] This variation is understandable only if the later dating of the church is accepted.

Simultaneously with the introduction of stone as an element in window construction it appeared elsewhere in the building, notably as a cornice at the head of the wall under the eaves and verges. In this position a dentil-cornice[5] was general in the eleventh century, even in late examples such as H. Theodoroi (pl. 31, 3) and Daphni. During the period of greatest simplicity, which there is good reason to place about the year 1100, the cornice is omitted altogether; for example at Kaisariane,[6] Ligourio and Plataniti.[7] A single church which has been placed in the early years of the twelfth century, Amphissa (pl. 28, 1) retains the dentil cornice. Elsewhere the stone cornice is the rule; to the examples which Millet cites[8] may be added Chonika,[9] Ioannes Kynegos,[10] Sagmata (pl. 29, 1) and of course H. Nikolaos sta Kampia.

[1] *Op. cit.* pl. 3, 1; whence, Εὑρετήριον, I, fig. 93.
[2] S. and B., fig. 45, A.
[3] *Ibid.* 69[1].
[4] Millet, *op. cit.* fig. 118.
[5] 'Corniche de dents'; cf. Millet, *op. cit.* 266 ff.
[6] *Ibid.* fig. 106.
[7] Struck, *op. cit.* 192, fig. 1.
[8] *Op. cit.* 267.
[9] Struck, *op. cit.* pl. VII, 1.
[10] Apse and dome only; cf. pl. 28, 2.

Exceptionally at Gastoune, a church which has been placed in the second half of the century, the dentil cornice is retained and brick is used exclusively in all the windows (pl. 29, 2, 3). This presents no difficulty if it is remembered that the church stands in the centre of the plain of Elis where stone of any kind is hard to come by, let alone one that can be worked to a satisfactory finish. This no doubt is the explanation of another curious feature of this church, namely, the multiplication of the vertical and horizontal tiles at the expense of the stonework. This treatment is found elsewhere in the twelfth century only at Vlachernai, also in Elis only a few miles from Gastoune, and therefore subject to the same geological limitations.

III. Tympanum Filling.

In the filling of the space between the subsidiary arches of the individual lights and the relieving arch which embraces them it is possible to trace a general development during the two centuries and to distinguish characteristics of particular periods.

At the Katholikon of Hosios Loukas the broad Constantinopolitan windows leave a large spandrel, but the decorative potentialities of this field do not seem to have been realised. The filling is in some cases of rubble,[1] in the upper west windows of regular *cloisonné* [2] and in the east of horizontal courses of tiles.[3] This diversity points to the conclusions that at the time of the building of the church the motif was a recent innovation and that it was introduced to supply a structural rather than an æsthetic need.

The Panagia Lykodemou provides the earliest examples of grouped windows in essentially Greek work. As might be expected, the tympana have nothing in common with those of the Katholikon, which are tentative and, it would seem, relatively early. That of the Bema window (pl. 31, 4) comprises three circular sinkings each covered with a small arch, the smaller lateral windows have similar sinkings but only one in each case. In all three windows the remaining space inside the relieving arch is filled with cut-brick units forming Cufic figures. The gable windows of H. Aikaterine [4] exactly reproduce the smaller windows of the Lykodemou church (pl. 27, 1). Here too the small remaining spandrels were probably filled with Cufic brickwork; they are at present obscured by plaster.

During the period of decline in the use of Cufic patterns in masonry they remained the typical ornament of window tympana; there are good examples in the gable windows of the Kapnikarea. Even after its complete disappearance from the masonry Cufic brickwork was retained as a tym-

[1] *E.g.* a window on the north facade; S. and B., fig. 17.
[2] *Ibid.* pl. 7. [3] *Ibid.* pl. 9.
[4] The east windows of this church have been walled-up and plastered.

panum ornament: notably at Aulis, the north window of the Prothesis,[1] H. Theodoroi at Athens, both in the windows of the east end[2] and in six out of the eight in the dome,[3] and at Daphni in the south aisle window. Lampakis published the two patterns from the Daphni window without any indication of their architectural context.[4] The latest examples of Cufic brickwork such as those at Amphissa which have already been discussed in detail above, though not actually in tympana, are closely associated with windows. Their survival is the more understandable on that account. Finally may be mentioned the use above the arches in the crypt of H. Nikolaos sta Kampia of cut-brick units similar to those used in Cufic work, but here without any attempt to reproduce Cufic characters.[5]

Ultimately the Cufic element disappears entirely and a purely geometric filling takes its place in the tympana. At Daphni, with the exception of the one window already mentioned, the fillings are of uncut bricks bedded horizontally and vertically in simple geometric patterns.[6] These are strikingly similar to the brickwork in the four gables of the Kapnikarea Exo-narthex (pl. 31, 1 and 2). This affinity suggests that Daphni cannot be much later than the addition to the Athenian church, which is on stylistic grounds anterior to its near neighbour, H. Theodoroi, 1065 (*v. supra*, p. 108); Daphni could then hardly be later than 1080. Occasionally the Daphni type with horizontal and vertical tiles is followed; one can instance the north window of Ioannes Kynegos (pl. 28, 2) and compare a second tympanum filling in the crypt of H. Nikolaos.[7] Much more common is a curvilinear form; here the tile-courses follow concentrically the curve of the subsidiary arches and the individual units are themselves curved. One of the best examples is the Bema window of Kaisariane;[8] in a more rudimentary form the same filling is found at H. Theodoroi (pl. 31, 3). The examples at Chonika[9] are typical. The curvilinear filling seems to have remained in use until the introduction of stonework left no tympanum to be filled. Thus at Hagia Mone, where only the west windows are stone-dressed, the curved brick filling is used elsewhere.[10] The north gable window of the Omorphe Ekklesia shows an unusual combination of brick and stone; here the two subsidiary arches are built in stone, but the tympanum above them is of brick and follows the curvilinear type.[11] Finally, at Gastoune, which dates evidently from the time when stone dressings were general

[1] This feature, clearly visible on Lampakis' negative, is barely distinguishable in the reproduction: Ἐφημ. 1931, 138, fig. 15.

[2] (Weir Schultz), *op. cit.* 381, fig. 7.

[3] Millet, *op. cit.* fig. 96.

[4] *Daphni*, 84. nos. 2, 3; *Mémoire*, figs. 78, 79.

[5] S. and B., fig. 47, *a*.

[6] Millet, *Daphni*, fig. 27.

[7] S. and B., fig. 47, *b*.

[8] Strzygowski, *op. cit.* fig. 7*b*; Lampakis, *Mémoire*, fig. 49; Millet, *op. cit.* fig. 106.

[9] Parabemata windows; Struck, *op. cit.* pl. VII, 1.

[10] *Ibid.* pl. VIII.

[11] Orlandos, Ἡ Ὄμορφη Ἐκκλησία, fig. 11.

elsewhere, there is a good example of the curved brick filling in the Bema window (pl. 29, 3).

The continuity of these tympana fillings is often broken by the insertion of a central motif. In the west gable window of the Kapnikarea church the Cufic patterns are interrupted by a flowering cross which is similar to that of the Panagia Lykodemou.[1] In the east window of Ioannes Kynegos there is a simpler cross motif exactly paralleled at H. Nikolaos sta Kampia in one of the tympana of the crypt.[2] This in addition to the general similarity of design in the tympana of the two churches suggests contemporaneous building. The cutting of these crosses is identical to that of a cross-pattern at Amphissa (pl. 30, 56), than which church they cannot be much later. A brick cross above the Bema window at Gastoune (pl. 29, 3) shews that the motif survived to the end of the period.

More common as a tympanum ornament is a glazed bowl set in mortar. This form of decoration was general during the twelfth and following centuries and in the eleventh was by no means unknown. For we may safely assume that the circular sinkings in the tympana of the east windows of the Panagia Lykodemou, now filled with modern plaster reliefs, originally contained bowls (pl. 31, 4); the similar sinkings in the windows of H. Aikaterine have bowls *in situ*, but these are modern. At H. Theodoroi this ornament is generally used,[3] but unfortunately few of the original bowls have survived and these are much damaged. Bowls occur in every instance where the curvilinear tympanum filling is used; even in stone-dressed windows they are not unknown [4] and once, at Merbaka, they are introduced into the masonry.[5] Many of these bowls are contemporary with the churches into which they are built; their importance for the chrolonogy of Byzantine pottery has been hinted at but never systematically examined.[6]

IV. Lateral Semi-arches.

Millet's shrewd remarks on this feature [7] need only be summarised here. There are two distinct groups:

1. *Associated with an archivolt.* This type derives ultimately from the division of an open semi-circular tympanum by two columns or piers and as in the prototype the lateral compartments remain open. Rarely found in Greece, it is evidently a Constantinopolitan feature. To the com-

[1] Lampakis, *Daphni*, 87, no. 20; *Mémoire*, fig. 77. [2] S. and B., fig. 47, *b*.

[3] West gable: pl. 31, 3. South gable: Couchaud, *op. cit.* pl. 10, 2; Castellazzi, *op. cit.* pl. 5. Central apse: *v. supra*, p. 117[1], and add (Weir Schultz), *op. cit.* 381, fig. 7.

[4] Merbaka, Parabemata windows (Struck, *op. cit.* pl. VI, 2); Omorphe Ekklesia (Orlandos, *op. cit.* figs. 7, 11).

[5] Millet, *op. cit.* fig. 118.

[6] Cf. Talbot Rice, *Byzantine Glazed Pottery*, 16. [7] *Op. cit.* 207 ff.

promising example at the Katholikon of Hosios Loukas cited by Millet [1] may be added two others much more workmanlike: the north and south gable windows of H. Nikolaos sta Kampia [2] and that in the west gable of the Amphissa church (pl. 27, 4). In both examples the small spandrels between the arches and the archivolt are filled with curved tiles in concentric courses. This identity of treatment suggests proximity in date.

2. *Associated with a gable.* The lateral semi-arches here fill the angles, are blind and support a single central window which is sometimes subdivided. The following evolution may be traced:

Kapnikarea Exo-Narthex. A small semi-arch, in some cases hardly more than a quarter-circle, supports the single window of each of the four gables (pl. 31, 1 and 2).

The motif is repeated at this undeveloped stage in each of the four gables of the small church of H. Georgios near Loukisia in Boeotia (pl. 27, 3). The gable windows of another Boeotian church, H. Nikolaos at Aulis, though much larger were similarly adorned with a small quarter-circle at cill level on either side.[3]

H. Theodoroi, Athens. In the south and west gables the quarter-circles are raised to the level of the springing of the window arches and the enclosing arches are doubled (pl. 31, 3).

Hagia Mone. The quarter-circle at springing level is enlarged to a semi-arch by dropping its cill, but this is stopped above the level of the central window (pl. 28, 4).

Merbaka. The feature is further enlarged so that its cill is level with that of the window.[4]

If the above order of these churches is altered the development of the motif can no longer be rationally traced. It is, therefore, reasonable to suppose that this order represents their correct chronological sequence.

Gastoune. The semi-arches of the south window reproduce the Merbaka type (pl. 29, 2) and must on that account be placed in the second half of the twelfth century. Bearing in mind the absence of the cut vertical tile by which it is shown anterior to Merbaka and Vlachernai, one can only date it in the third quarter of the century.

As might be expected, the brickwork filling of the semi-arches closely follows the development of the tympanum filling. In the most northerly gable of the Kapnikarea Exo-narthex there are cut-brick patterns (nos. 2–3, pl. 31, 2). As this type of filling does not recur in any of the other examples of this feature this is a satisfactory confirmation of its earlier dating. The

[1] *Op. cit.* fig. 104; S. and B., pl. 8, whence Wulff, *op. cit.* fig. 4. [2] S. and B., pl. 58.

[3] Ἐφημ. 1931, 138, fig. 15; cf. *supra*, p. 118[2].

[4] South gable: Struck, *op. cit.* 206, fig. 3, pl. X, 4; Lampakis, *Mémoire*, fig. 91. North gable: Struck, *op. cit.* pl. X, 5; cf. Diehl, *Manuel*[1] (1910), fig. 211, *ibid.*[2] (1925), fig. 219.

other gables of the Exo-narthex (pl. 31, 1), H. Theodoroi (pl. 31, 3) and the Argive churches, favour a simpler filling of tiles in parallel courses which corresponds to the curvilinear type of the tympana. Bowls are used at Loukisia (pl. 27, 3) and Gastoune (pl. 29, 2).

CONCLUSION

The conclusions from the foregoing considerations are summarised in the accompanying chronological table. The figures printed in heavy type indicate the pages where my chief arguments are to be found. These arguments derive from the sequence of building technique, the safest index of development in architectural style. That sequence in turn has been traceable with certainty, thanks to the existence of a few churches whose dates are fixed by incontestable external evidence—evidence which was summarised at the beginning (*supra*, p. 99) and is my ultimate authority. But identity of technique in one feature alone has not been considered sufficient justification for placing two churches in the same period, and confirmation has in each case been sought in other considerations. Consequently the buildings that are here related to each other have been examined from several different view-points; each approach has led to the same conclusions.

In the table the names of the most important churches are printed in capitals. The remainder, being smaller and simpler, have inevitably fewer outstanding architectural features for which parallels may be sought, so that the dating in these cases is less certain. In no case, however, is there any doubt of the church being placed in the correct quarter-century; and the order of the churches within these subdivisions is throughout consistent with all the data now obtainable.

In addition to the evidence of building technique there is a parallel body of evidence not yet available for consideration. This I have hinted at in connection with the Panagia Gorgoepekoös. This church and many others which have been discussed are furnished with carved ikonostases, door architraves and capitals which are in most cases contemporary with the surviving buildings. The carved ornament of the Middle-Byzantine period has not as yet been systematically studied from the chronological point of view; when this is done the carved details of the churches in question may greatly facilitate the dating of their architectural context.

The appended table should therefore be regarded not as in itself conclusive but as contributory to the establishment of a final chronology. Yet in so far as it represents the architectural evidence at present available it is definitive, for that evidence is open to no other interpretation. It is possible that the study of important unpublished churches such as Hosios Meletios may elucidate the origin and development of the building processes

here discussed and allow the chronology of the period to be traced with greater precision than has been attempted. At the same time it is hoped that the present article, by collating the various pertinent data, has provided a true index of the present state of knowledge, which will facilitate the further study of the Greek churches. H. MEGAW.

CHRONOLOGICAL TABLE AND INDEX.

XIth century.

1st quarter:
KATHOLIKON, HOSIOS LOUKAS **93**, 100, 101, 104, 110, **115**, 116, 117, 120, **124**, 127.
H. APOSTOLOI, ATHENS . . 102, 103, **104**, **105**, 110, 111, **115**, 116, 120.

2nd quarter:
THEOTOKOS, HOSIOS LOUKAS . **93**, 102, 103, **104**, 105, **106**, 110, **115**, 116, 120.
PANAGIA LYKODEMOU, ATHENS **95**, 102–106, **104**, **115**, 116, 118, 120, 122, 124, 126
H. Aikaterine, Athens . . . . . 107, 122, **124**, 126.

3rd quarter:
KAPNIKAREA, ATHENS . . . 102, **107**, 116, 118, 120, 122, 124, **126**.
KAPNIKAREA EXO-NARTHEX . . . . **107**, 112, **118**, 121, 125, **127**.
H. THEODOROI, ATHENS . . **96**, 102, 106, 110, 116, 120, 122, 125, 126, 127.

4th quarter:
DAPHNI, ATTICA . . . **93**, 102, 103, **107**, **112**, 116, 117, 120, 122, **125**.
Kaisariane, Attica . . . . . 94, 101, **112**, 116, 121, 123, 125.
Ligourio, Argolis . . . . . **108**, 111, **112**, **117**, 118, 121, **123**.

XIIth century.

1st quarter:
CHONIKA, ARGOLIS . . . . . **102**, 108, 111, **112**, **117**, 118, 123, 125.
AMPHISSA, PHOCIS . . . . . 102, **109**, 111, **112**, **123**, 126, **127**.
Plataniti, Argolis . . . . . 108, **117**, 118, 123.

2nd quarter:
Ioannes Kynegos, Attica . . . . 94, 97–99, 101, 116, 123, **125**, 126.
H. NIKOLAOS STA KAMPIA, BOEOTIA . . 100, 112, 116, **123**, 125, **126**, **127**.
HAGIA MONE, ARGOLIS . . **94**, **97**, 102, 108, 112, 117, 118, 123, 125, 127.

3rd quarter:
SAGMATA, BOEOTIA . . . . . 95, **102**, **114**, 116, 123.
Omorphe Ekklesia, Attica . . . . . 101, 113, **114**, 123, 125.
GASTOUNE, ELIS . . . 109, 111, 113, 116, 117, **118**, 124, 125, **127**.

4th quarter:
MERBAKA, ARGOLIS . . 95, 101, 108, 111, **114**, 117, **118**, **119**, **123**, 126, 127.
VLACHERNAI, ELIS . . . . . 113, **114**, 116, 117, **119**, 124.

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Aulis, Boeotia . . 118, 125, 127.
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Demitsane, Arcadia . . . 99.
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Kalyvia Kouvara, Attica . . 113.
Kastoria . . . . . 110.
Loukisia, Boeotia . . . 127, 128.
Mezappo, Mani . . . . 101.
Skripou, Boeotia . . . 116, 120.
Sykaminon, Attica . . 115, 120, 123.
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Merbaka: fig. 4, 4–6, fig. 5, E–F.

Athens

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H. Apostoloi: pl. 30, 1–37.
Kapnikarea: fig. 2, A–B, fig. 5, A, pl. 27, 2.
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Attica:

Ioannes Kynegos: pl. 28, 2.
Omorphe Ekklesia: fig. 4, 1.
Sykaminon: fig. 4, 2, pl. 29, 4.

Boeotia:

Loukisia: pl. 27, 3.
Sagmata: fig. 4, 7, pl. 29, 1.

Elis:

Gastoune: pl. 29, 2–3.
Vlachernai: fig. 4, 8–10, fig. 5, G–H.

Phocis:

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ADDENDA.

P. 97, note 3. Athens, H. Theodoroi. Since the above article went to press Xyngopoulos has repeated his contentions that the church is a twelfth-century building and that the dated inscription may not be referred to its erection (Ἐπετηρὶς Ἑτ. Βυζ. Σπουδῶν, 10 (1933), 450–453). The new arguments he introduces demand a re-examination of the evidence which space does not permit here. But I cannot omit to observe that, setting the inscriptions aside, the church on stylistic grounds falls between the Kapnikarea and Daphni, that is to say in the third quarter of the eleventh century.

P. 98, note 6. Attica, Ioannes Kynegos. I followed Soteriou (*Guide du Mus. Byz.* 50) in calling Byz. Mus. 204 part of a templon epistyle. Re-examining the piece I see that it is more probably the cornice member of a door-surround. Lambros (Μιχ. Ἀκομινάτου, II, 629–630) sought to identify this fragment as part of a fourth inscription seen by Pittakis on the Acropolis in 1842 (Ἐφημ., 512, no. 835) but since lost. Hence originated Neroutsos' daring distortion of the published copy (Δελτ. Ἱστ. Ἐθν. Ἑτ., III, 1889, 106). But Lambros' identification cannot possibly stand, for the lost inscription was on a narrow stele. It does certainly mention the monastery (τῇ μονῇ τοῦ Προδρόμου τῇ τοῦ (Κ)υνηγοῦ) but being undated does not help to fix the year of its foundation nor the age of the present church.

PREHISTORIC EPIRUS AND THE DORIAN INVASION [1]

(Plates 32–34).

A. Prehistoric Epirus.
B. The Terrain of Epirus and the Pindus routes.
C. The literary evidence for the Dorian invasion.
D. The evidence, posterior to the Dorian invasion, showing the north-western connections of the Dorian peoples.
E. Archaeological evidence in support of the north-west theory.
F. Conclusions.
Appendix: the credibility of the literary sources.

A. Prehistoric Epirus.

Since the excavations of Carapanos at Dodona in 1878, Epirus has remained *terra incognita* to the archaeologist. In regard to prehistoric archaeology the reason is to be found in the Epirote terrain; the plains are usually small, and the humid climate encourages grass, with the result that settlements, unlike those of Thessaly or Macedonia, are too small to raise a tumulus and any deposit is covered with turf. The following sites include the re-excavation of Dodona by Mr. Evangelides and some scattered settlements found by myself during my visits to Epirus.[2]

1. Dodona. The prehistoric stratum rests on virgin soil, covers the whole excavated area, and is about 0·40 m. deep; the upper strata are Archaic and Hellenic 0·50 m. deep, and Hellenistic and Roman 1·30 m. deep.[3] The prehistoric stratum contains sherds (the deposit being generally scanty) and bones, but no building remains; we may then conclude that its depth relative to those of the upper strata represents a thin settlement of several hundred years' duration. In the following description of the finds we shall confine ourselves to the pottery, reserving the other objects for later discussion; the account is drawn from Evangelides' report[4] and confirmed by my visits to the site.

[1] I express here my indebtedness to the article of Mr. Heurtley, *A Western Macedonian Site and the Dorian Invasion* (*B.S.A.* xxviii, pp. 159–194), and the work of Professor Myres, *Who were the Greeks?* The use I have made of them will appear below.

[2] Made in 1930–1933, in all for seven months, extending geographically from the Aous to the borders of Akarnania.

[3] Evangelides Πρακτ. 1931, p. 85.

[4] *Id.* Πρακτ. 1930, p. 68. The pottery is as yet unpublished and I was unable to see it at the National Museum.

The clay is black, heavily granulated and occasionally with a red outer surface, and the pottery is hand-made but usually not hand-polished. The main ornamentation is plastic, both of the ' rope ' type, especially in

Fig. 1.—Dodona.

large pots, and mammiform, the former being concentrated just below the rim and the latter round the shoulder and handles; most of the ware is thick and the ornamentation roughly executed. Handles include the ' wish-bone ' in large numbers, and the horizontal pierced semicircular handle, often flattened slightly; rims are usually everted. Cf. figs. 1 and 6; Pl. 33.

2. Koutsoulió, 7 km. S.S.E. of Janina (Austrian Staff Map,[1] Janina sheet 40° 35′, 39° 34′) on the lowest slopes of a hill rising from a small cup

Fig. 2.—Koutsoulió.

west of the S.E. Janina plain. The site lies 300 m. S. of Chan Koutsoulió on the road to the mill and the excavation of the road led to the discovery

[1] Still the best map, despite minor errors in the Pindus highlands; referred to below under sheet only.

of the site.[1] A thin deposit of pottery was found for a distance of 300 m. in the soil resting on the limestone, at depths varying with the interstices of the limestone from fifteen centimetres to one metre; some Hellenistic pottery was found, mainly at the N. end of the site, but the prehistoric sherds were in the lower soil. The choice of site was determined by a bed of clay called the kerameío some 400 m. E. of the site, by the proximity of the plain, which is often swamped in winter, and by a small adjacent valley for water-supply.

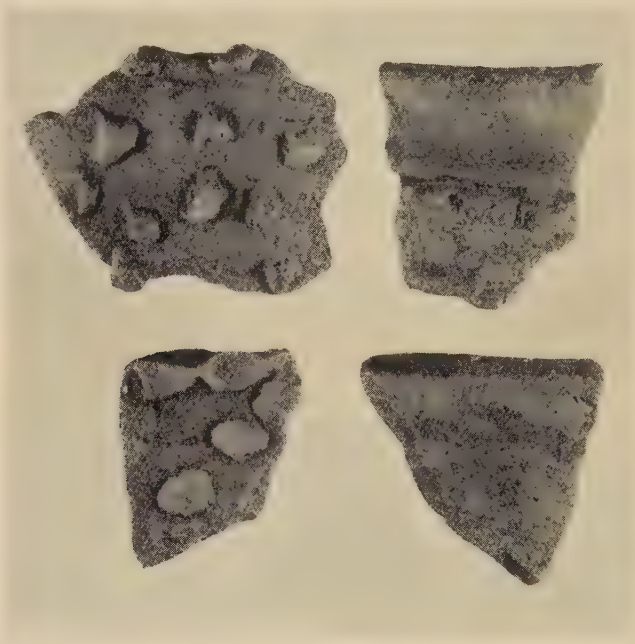

Fig. 3.—Koutsoulió.

The clay is reddish-brown and sometimes heavily granulated, the pottery generally is hand-made but not hand-polished, with plastic ornamentation of 'rope' chain, mammiform, or pockmarked type; ornamentation is placed below the rim or on the shoulder, but in some cases the walls were completely covered with rough mammiform decoration either moulded with the pot or added later; a few sherds have short vertical incisions in a raised band running round the shoulder of the pot. Handles include a lug, a large vertical rim-handle (probably of the wish-bone type) and a high vertical handle rising from the shoulder. Both everted and upright rims occur. Cf. figs. 2, 3 and 6.

[1] Mr. Christos Soules of Janina kindly informed me that pottery was being found.

3. Chan Térovo (Preveza sheet 38° 29′, 39° 25′, just S. of Chan Viros); some 200 paces N.N.E. of the Chan [1] above a cornfield, where stones were being excavated for the road. The Chan lies on the Jánina–Arta road just north of the narrowing of the Viros river gorge. The pottery lay in the thin depth of soil covering limestone rock and only a few sherds and bones had been unearthed; the pottery is rough, hand-made and in execrable condition, with a biscuit generally black; decoration is mammiform with one knob appearing on the rim, handles include a lug,

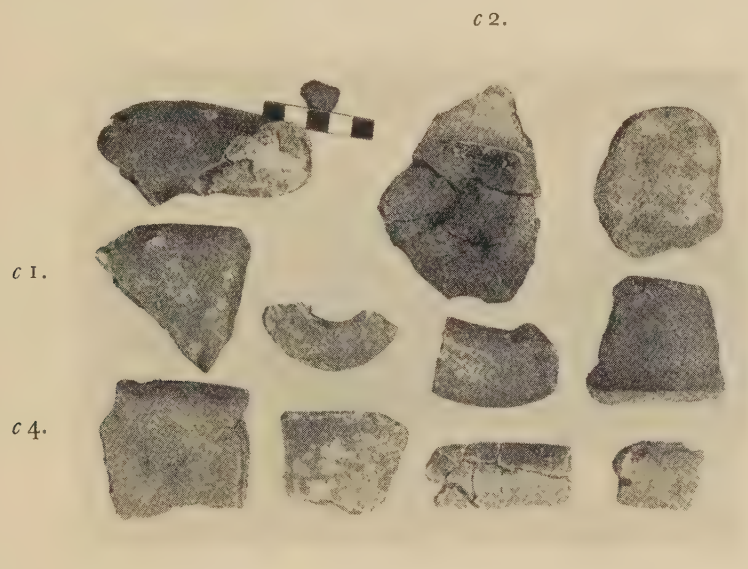

Fig. 4.—Chan Térovo.

a roll-handle below the rim and horizontal circular handles more or less flattened which fit on to the wall of the pot, and rims are mostly everted. Cf. figs. 4 and 6.[2]

4. Xerakía [3] (Arta sheet 39° 55′, 39° 58′, due S. of Zelmi); one hour from Loutró, on the path to Xerakía, on the top of the first ridge, where the path has worn a slight bed; one hour further there is a bakáli or small shop. Clay is brown and grey to black, pottery is rough and hand-made without polish; mammiform decoration again occurs, handle fragments suggest one vertical rim handle, a horizontal rim handle and two large

[1] Not to be confused with some Hellenistic tombs E. of the Chan.

[2] I am indebted to Miss Benton of the British School for the description of these sherds.

[3] Mr. Cook of the British School collected some of these sherds.

vertical handles springing from the shoulder; only two pieces of rim were found and these were not everted. Several fragments of one jar fitted to show a diameter of 0·26 m. and on the outer wall only red colouring was visible, due either to the addition of a layer of red clay or to oxydisation. On this site I found an obsidian blade, the obsidian being very opaque.[1] Cf. fig. 6.

5. At a few sites in Epirus of Hellenistic date I picked up sherds which may indicate earlier settlements. At the temple site on the saddle of Mt. Zálongo above the village Kamarína (later site = Kassope), where the Italians had dug during the War, I found one hand-made hand-polished sherd of good quality; at Goúrana guarding the E. end of the Acheron river gorge two sherds of red, heavily granulated clay of which one is probably a lug and the other is a large vertical rim-handle similar to that

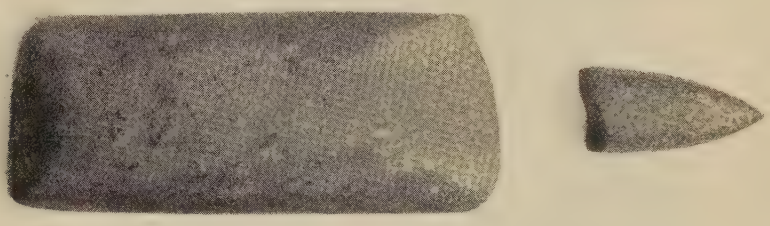

Fig. 5.—Prámanda: Stone Axe-heads.

found at Koutsoulió; below the village Rízani in the Kalamás (Thyamis) valley on a low mound on the N. side of the road beside a small bridge I found a sherd with a chocolate-coloured slip on buff biscuit, being a fragment of an inverted rim with a mammiform knob on the rim itself, and a rippled rim fragment similar to Minyan ware: while I do not think these last sherds early, the position on the edge of a small plain by a stream suggests the possibility of a prehistoric site. At Plaka by Cape Treporti in the Gulf of Valóna (Valóna sheet 37° 5′, 40° 29′) two sherds which may be Late Mycenaean were found. In the Bibliotheke of Vísani (Corfu sheet 38° 10′, 40° 37′) I was shown a vertical rim-handle of rough black hand-made ware, said to have been found locally. At Prámanda by the church Hagía Panagía on a ridge to the S.W. of the village square I found two stone axe-heads and some rough pottery, probably not prehistoric;

[1] The only obsidian reported from this area consists of two blades in the Finlay Collection in the British School, said to come from Salagóra (S. of Arta on the Ambracian Gulf); I visited Salagóra and am convinced that there was never a prehistoric settlement there.

of the axes, one is of hard black stone and is not bored, the other is a fragment of hard grey granite. Cf. fig. 5.[1]

The relationship of the pottery above described is clear. The wish-

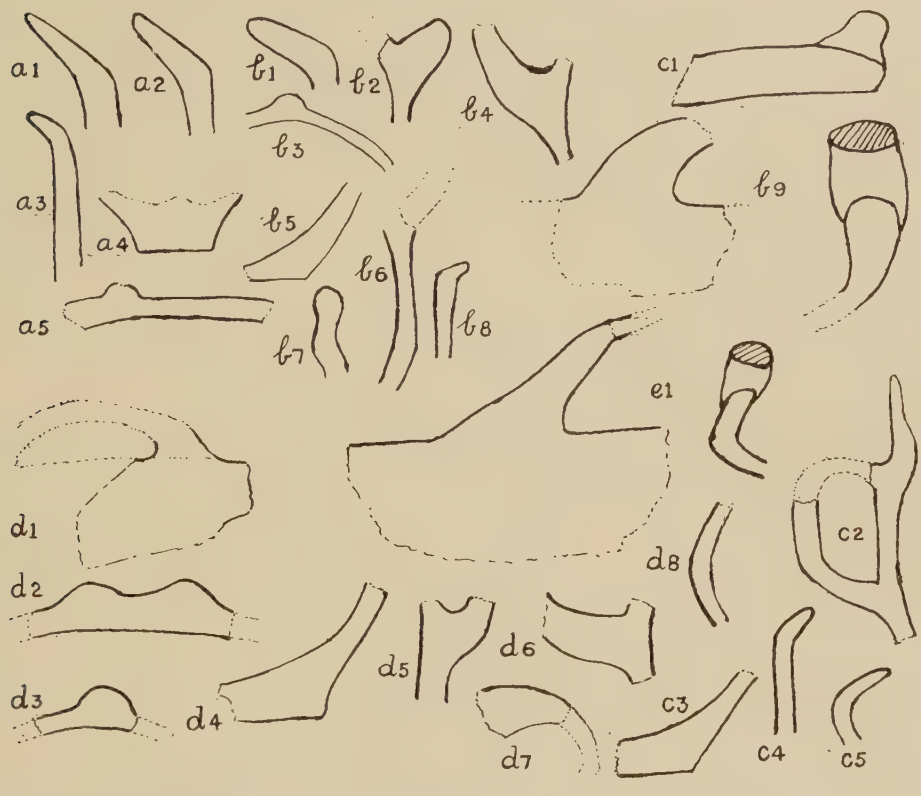

Fig. 6.—Profiles of Bronze-Age Pottery found in Epirus.[2]

(Cf. figs. 1, 2 and 4 for cross-references.)

a 1–a 5: Dodona. c 1–c 5: Chan Térovo. b 1–b 9: Koutsoulió (b 2 a lug; b 9 a large vertical rim-handle from two angles). d 1–d 8: Xerakía. e 1: Goúrana (cf. b 9).

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[1] As these sites are mentioned for future investigation, I should add that a mound on the right bank of the upper Aous between Mesogephyra and Molývoskepastó Moné and just to the east of the main road lies on an important route; the pottery I found there led to no definite conclusions. Evangelides, Βόρειος Ἤπειρος, p. 24, says he found hand-made prehistoric pottery on the hill of Philátes (lower Thyamis valley), and Leon Rey, *B.C.H.* xlii, p. 258, note 2, records the presence of numerous prehistoric sites in the Aous valley. No description of the pottery is given and in neither case have I found anything on the spot to confirm their opinions; Mr. Wace, however, kindly informs me that M. Picard of the French School reported sites in the Aous valley.

[2] Most of these sherds are now at the British School. c 1–c 5 were kindly drawn by Miss Benton.

bone handles at Dodona are reported by Evangelides to be of the earliest Macedonian type, and pierced semicircular handles are found from many Macedonian sites;[1] both these handle-types are characteristic of the Early Bronze Age in Central Macedonia, period A. The everted rims illustrated in fig. 6 and the plastic decoration are also closely paralleled in Macedonian sites.[2] It is then clear that Epirus or at least South Epirus was occupied by a people whose culture derived from Central Macedonia; settlements were small, backward in culture (*e.g.* no painted ware and local exaggeration of decoration motifs), and it may be presumed from the depth of deposit at Dodona and the frequency of early handle-types that the first wave of peoples carrying this culture came from Macedonia in the earlier half of the Bronze Age, conjecturally soon after 2000 B.C.[3] The type of settlement is reminiscent of Bouboústi and Páteli in W. Macedonia, which are clearly small shepherd camps.[4] The close relation of these sites to the passes used by the Vlach shepherds is illustrated in fig. 7; its significance will appear below.

Other areas adjacent to Epirus are prehistorically speaking little known. Noack's survey of N. Acarnania is not yet published, and though the wish-bone handles from Choirospiliá on Leukas show connection with Bronze Age Macedonian culture, it is not clear whether the connection is via S. Greece or N. Greece.[5] Dörpfeld's report of Mycenaean pottery from N.W. Corfu (*A.A.* 1913, pp. 106 ff.) has not been confirmed. Unpublished sherds from an unknown site in Corfu were, however, shown to me by the

[1] Evangelides, *loc. cit.*, quotes parallels to Dodona pottery from Heurtley, *B.S.A.* xxvii, Pl. iii, 9 and xxxix, p. 166, fig. 41, 1 for the former, and from Heurtley, *B.S.A.* xxvii, Pl. 1, 3 (Vardaróftsa), xxviii, Pl. xiii, *b* 8 (Boubousti) and *B.C.H.* xli–xliii, Pl. 1, 1 for the latter.

[2] For plastic decoration cf. 'rope' type at Gona in *B.C.H.* xli–xliii, Pl. x, 1–4 and 8–10, at Dourmouchlon *ibid.* Pl. x, 5, at Vardaroftsa in *B.S.A.* xxvii, Pl. vi, 5 and Pl. x, *a*, and at Hagios Mamas, xxix, fig. 13, no. 10. For mammiform decoration cf. Gona and Dourmouchlon *B.C.H.* xli–xliii, Pl. xii, 1–3, or Molyvopyrgo in *B.S.A.* xxix, fig. 43, cf. pp. 135–136. Points of similarity are sufficiently obvious to make cross-references from the pottery here illustrated unnecessary.

I must express my gratitude, as one not trained in archaeology, to Mr. Heurtley for his kindness in taking me to Macedonia, a visit to which I owe my acquaintance with Macedonian pottery in the field, and for his interest in my work; in 1931 when I showed him sherds from Koutsoulió he confirmed my opinion that they were related to Bronze Age Macedonian.

[3] Using Heurtley's table in *B.S.A.* xxviii, Pl. xiv. The alternative source, Thessaly, as the secondary centre of dispersion, *ca.* 1800–1600 B.C., can hardly be considered in view of the lack of painted ware and other characteristics of Thessalian cultures during this period.

[4] *Ibid.* p. 165. The Epirote sites in view of their thinness of deposit, lack of building remains, and geographical situation (*e.g.* Xerakía one hour above the Amphilochian plain on a wooded ridge), can only have been occupied by small shepherd communities.

[5] *Ibid.* p. 182 and note.

Ephor, Mr. Papademetriou; a cursory inspection showed some Macedonian Bronze Age shapes and one instance of pock-marked ornamentation on a raised shoulder band, already noted in Epirus and Macedonia, and also smooth red hand-polished ware of fine quality reminiscent of Bronze Age pottery at Olympia. In S. Albania the excavations at Boutrinto and Phoenice conducted by Mr. Ugolini have produced no prehistoric pottery, and nothing is reported by Leon Rey from Apollonia. From Skutari in N. Albania plastic ornamentation of chain and pock-marked type has been published; the site (Kalaia Dalmaces) is of disputed date, but hammer-axes of a type unknown in Greece are apparently associated with the sherds; the earliest dating yet hazarded precludes the possibility of an Illyrian origin for our Epirote pottery.[1]

B. The Terrain of Epirus and the Pindus Routes.[2]

We must now relate our conclusions concerning Epirus in the Bronze Age to the geographical nature of our area; this department of our inquiry will be seen to have importance when we come to the question of the Dorian invasion.

Epirus is the most humid part of Greece and has always been renowned

[1] Cf. *Zeitschrift für Ethnologie* xxxiii, pp. 43 ff., figs. 32, 43: similar ornamentation from Sanskimost in Bosnia, dated 600–400 B.C., *Wissenschaftliche Mittheilungen aus Bosnien und Herzegovina*, vi, pp. 62 ff., figs. 28, 34, 150, 151. A fibula similar to one found at Dodona (Carapanos, *Dodone et ses Ruines*, Pl. 51, 8) comes from the same locality. The hammer-axe is apparently peculiar to Dalmatia and Illyria; Mr. Lef Nosi at Elbasan in Central Albania on the Via Egnatia route showed me a similar one found in the locality (for the axes from Skutari cf. illustrations in Ugolini *Albania Antica* Pl. xv, fig. 16). Ugolini *ibid.* p. 163 dates the axes to the Bronze Age; Kaer, *Wiss. Mitt. aus Bosn. u. Herz.* vi, p. 19 to 1250–400 B.C.; Nopcsa *ibid.* xii, pp. 168 ff. to the Early Roman Empire, and Reinach, *L'Anthropologie* xii, pp. 662 ff., to 300–500 A.D. Vulpe, *Prähistorische Zeitschrift* 1932, pp. 132 ff., has reviewed the question and decided (p. 141) for 1000 B.C.—a date which rests upon his explanation of the Cadmus legend as an echo of Phoenician colonisation; the dateable objects found with the axes are *ca.* 600 B.C. (*ibid.* p. 139). The pottery associated with these axes I should ascribe to 700–500 B.C. at latest, and connect the spread from the South with the Via Egnatia–Adriatic route which was certainly in use at this time (cf. the rich finds at Trebenischte, which would seem to imply more than a unilateral trade, whether from Macedonia or from Epidamnus and Apollonia). It should also be noted that a pottery of similar ornamentation, technique, and crude manufacture has been discovered in the Salzburg region; with the notable exception of the wish-bone handle, striking parallels are observable, cf. Caroliner-Augusteum Museum, Salzburg, Room xiv., Cases 1 no. 265, 6 nos. 294–5, 7 nos. 299–301. Until this pottery can be dated more precisely, the question of an ultimate Northern origin must be shelved. There is one example of the hammer-axe at Salzburg, case 5 no. 6390, but the origin of the find is unknown.

[2] Cf. fig. 2; the best maps are Leake, *Travels in Northern Greece*, vol. i; *Murray's Handy Classical Maps*, ed. Grundy, Northern Sheet; Stählin, *Das hellenische Thessalien.* Cf. especially the Austrian Staff Maps.

for its flocks and pasturage;[1] the taking of the oath by the Epirote kings described in Plut. *Pyrrhus* 5 probably coincided with the movement of flocks from the plains to the mountains in spring (this is still a striking scene), and the presents made on the occasion were, if we are to believe Plutarch, of a pastoral order. Epirus was also heavily wooded in antiquity; the Dodonaean oaks have disappeared, but it is reasonable to suppose that the rarity of prehistoric sites in the Jánina plain may be due to the presence in prehistoric times of extensive forests.[2] At the beginning of the classical era Epirus was a pastoral country, and it still is.[3] The Vlachs, or in Epirus Koutsovlachs, are the shepherds of modern Epirus; leading a nomad existence, their winter pasturages are located in Western and Central Macedonia, Thessaly, the Spercheius valley, N. Aetolia, N. Acarnania, Epirus, and the Bérat area N. of the middle Aous; for summer pasturage they move into the Pindus range, concentrating especially on the large Alpine plateau on Mt. Lacmon just N. of Métzovo. The wanderings of these people are instructive. As they are dictated by the geographical conditions of Northern Greece, we shall not be surprised to find that a similar mode of life was in vogue in the Bronze Age; the small shepherd camps at Páteli, Bouboústi, Koutsoulió and Xerakía are strikingly similar to Vlach settlements, and the distribution of cultures deriving from Central Macedonia[4] in the course of the Bronze Age (if Epirus is now included, the only gap is Bérat) coincides with the area of winter pasturage used by the Vlachs; like the Vlachs too, these people seem sometimes to have settled in communities, developing a more refined style of pottery

[1] Hesiod fr. 90 (149):

ἐστί τις Ἑλλοπίη, πολυληΐος ἠδ' εὐλείμων
ἀφνειὴ μήλοισι καὶ εἰλιπόδεσσι βόεσσιν,
ἐν δ' ἄνδρες ναίουσι πολυρρῆνες πολυβοῦται,
πολλοὶ, ἀπειρέσιοι, φῦλα θνητῶν ἀνθρώπων,
ἔνθα δὲ Δωδώνη τις κ.τ.λ.

Cf. Semple *Geography of the Mediterranean Region* p. 323, rainfall of 40 ins.; *ibid.* pp. 290, 309, 323, 331 for horses, cattle and sheep; Aristotle *Hist. Anim.* iii, 21; and Herodotus ix, 92 (Apollonia).

[2] Cf. Semple, *op. cit.* p. 281. Livy xxxii, 13: montes Epiri . . . interiecti Macedoniae et Thessaliae . . . vestiti frequentibus silvis sunt; iuga summa campos patentes aquasque perennis habent (the plains are those N. of Métzovo). Wace *Prehistoric Thessaly*, p. 7 suggested that the low western limit of Thessalian sites was set by the forest-belt reaching lower down Pindus than it does to-day. Large forests of holm-oak are found in the upper Kalamas valley and in Amphilochia to-day.

[3] Cf. Thuc. i, 136 for the conditions at the court of Admetus, and Plut. *Pyrrhus* 5.

[4] Heurtley, *B.S.A.* xxviii, pp. 185–6. For the Vlachs cf. J. Bourcart *L'Albanie et les Albanaises* Paris 1921, and Wace and Thompson *The Nomads of the Balkans*. The Bronze Age people, like the Vlachs to-day, pursued their nomad mode of life for centuries; the homogeneity of their culture leads Heurtley *op. cit.* p. 187, to assume 'perhaps a central point of reunion'—was not this reunion formed on the plateau N. of Métzovo, the summer rendezvous of many Vlach shepherds?

through contact with local cultures, as in the Dotian plain and at Lianokládi. The nameless peoples of the Early Bronze Age were not, however, the only πολυπλάνητοι nomads; the upheaval known as the Dorian invasion was caused by peoples of the same mode of life.[1]

We must now ask the question—what routes in the Pindus range were used by these Macedonians and later perhaps by the Dorians? An investigation of the Pindus passes [2] shows that Wade-Gery's picture [3] of a people 'moving up and down the spine of Pindus' and Myres' theory [4] that 'the trough of the Achelous' represents a route of passage and is easily attainable from the central knot of Pindus do not conform with the facts of geography; neither mountain-spines nor river-valleys in N. Greece are noted for such characteristics.[5] The main routes in use to-day are the following (cf. fig. 7):—

1. *The Via Egnatia route Monastir-Elbasan*, involving two difficult passes of 933 m. and 609 m.[6] Páteli lies close to this route.

2. *Kastoría–Koritsá–Liáskovik.* The pass of Tsankóni from Kastoría to Koritsá via Biklíshta is easy,[7] but the region from Koritsá to Liáskovik is thinly populated. The plain of Koritsá is the richest in Albania. The modern road from Santa Quaranta to Flórina follows the route from Liáskovik to Koritsá and then further north to Flórina; there is no road from E. to W. Greece south of Koritsá, until we reach the Peloponnese. Kastoría–Liáskovik = 3 or 4 days.

3. *Grevená–Métzovo–Jánina.* A steady and gradual ascent from Grevená to Miliá (10 hrs.), Miliá–Métzovo across the plateau (3 or 4 hrs.), Métzovo–Jánina above the Arachthus river and over a low pass to the Jánina plain (11 hrs.). Of this route the last stage alone is rough; the whole takes three days, but a two-day route is also in use from Jánina to Miliá via Grebeníti, and so to Grevená.

4. *Jánina–Métzovo–Kalabáka* via the same route to Métzovo, thence a stiff climb and narrow path to the Zýgos, or ridge stretching from the headwaters of the Arachthus to those of the Peneius, and down via Malakássi to Kalabáka in the Thessalian plain. The route Jánina–Zýgos is the more difficult part. Times: Kalabáka–Malakássi $8\frac{1}{2}$, Malakássi–Métzovo $4\frac{1}{4}$, Métzovo–Jánina 11 hrs.; the whole is sometimes traversed in two days.

[1] Cf. Hdt. i, 56.

[2] I have walked over most of the passes here described (part of no. 2 being done by car), and also the upper Aous and Achelous valleys. The times given are my own and are those of a walker, considered fast, carrying a rucksack.

[3] *C.A.H.* II, p. 530.

[4] *Who were the Greeks?* p. 151.

[5] Cf. the lower Haliakmon, the upper Aous and the lower Arachthus; limestone mountains usually form deep and inaccessible gorges when cut by a river bed. The photographs shown are no exaggeration. Cf. the illustrations in Woodhouse, *Aetolia.*

[6] Cf. Miller *Itinera Romana* pp. 518 ff.

[7] Cf. Heurtley *B.S.A.* xxviii, p. 160.

FIG. 7.—RIVER-MAP OF PINDUS RANGE AND ADJACENT TERRITORY.

5. *Loutró* (*by Argos Amphilochicum*)–*Karpenísi* (*upper Spercheius*) by Xerakía, Tatárna, and Phrángista. This route involves several low passes and one high pass at the E. end to cross Tymphrestus, while the Achelous and its tributaries cannot be forded at all times of the year; the passage is certainly arduous, but the stages from large village- or shop-sites are short. From Loutró to the shops at Chalkiopoúli (Arta sheet = Krýa Vrýsis on the river Patiopoúli = Inachus) takes 5 hrs., thence to the shops at Tatárna, where the Achelous bed opens out into a small plain, takes 4 hrs.; to the bridge at Víniani 7 hrs. (Phrángista, a large hill village, is 4½ hrs. from Tatárna), and finally the stiff climb up to the head of the pass (in the snow-level Easter 1933) and down to Karpenísi 4¼ hrs. Mr. Cook of the British School and I took 25 hrs. in all; it can be done easily in 3 days.[1] Cf. Pl. 32.

6. *N.E. Thessaly–Grevená* via the Tirnavós pass to Diskáta is moderately easy, while 7. *Kalabáka–Velemíshti–Eleftherochóri* is fairly easy without any hard climb, following a tributary of the Peneius to leave Thessaly; I have not traversed either of these, but they are described by Wace and Thompson in *The Nomads of the Balkans*.[2]

8. *Arta* (*Ambracia*)–*Liáskovo–Mouzáki* (*near Gomphi*). This area is more sparsely populated than the Tymphrestus pass area, while the nature of the passes is very similar. Times are Arta–Korákou bridge 14 hrs., thence to Mouzáki 17 hrs.; long stages are necessary owing to the nature of the ground and lack of villages *en route*. This pass is now little used, and is rather more difficult than the Tymphrestus pass to the south, taking three hard days.[3] Cf. Pl. 32.

9. *Sérvia–Elassóna* (*Oloösson*) crossing the western slopes of Olympus. A short, steep pass, used by the modern motor-road.

These passes are considerably used by pack-horse caravans, and especially by the Vlachs when driving their flocks and taking their families and belongings to the summer pastures; they only present any serious difficulty in winter, and owing to their shortness they can be crossed by large bodies of people travelling light.

The country traversed by the passes is, however, very difficult and well-nigh barren. The upper Achelous, N. of the Tymphrestus pass to Halíki and the Zýgos, only contains hut-settlements and small villages, deserted for the most part by their inhabitants in winter. I have descended the Achelous valley from Halíki[4] near the source to Sívista (latitude of

[1] Best map in Woodhouse, *Aetolia*.

[2] I am indebted to Mr. Wace for information concerning these routes.

[3] This account and the times for this pass are taken from the note-books of the late Mr. S. S. Clark, Fellow of Exeter College; he was undoubtedly a fast walker. I have used the pass as far as Korákou and thence via Vítzista to Porta Pazári, a northern variant of the Korákou–Mouzáki section. Cf. Pls. 33, 34.

[4] I reached Halíki by a high and difficult pass, rarely used now, from Koutsoulió via Prámanda and Sirákou-Kalarýtes. Cf. Pl. 34.

the Arachthus mouth), and found the passage considerably harder than any other in Greece; the river runs in precipitous gorges and the whole region between the Epirote and Thessalian flanks of Pindus is cut by high ranges running transversely (cf. Pls. 32–34) from East to West. There can be no question of a passage down the 'Achelous trough' from the Zýgos or Métzovo; and the barren precipitous summits or narrow upland valleys of the 'Pindus spine' present a still less attractive prospect. Even if we take these phrases in the widest meaning possible, the physical difficulties are very great, and food even for one is hard to obtain.

The journey from Grevená in Western Macedonia to Stratus or to the Western Corinthian gulf can only be made via Métzovo–Jánina–Arta–Keravassará; similarly from Grevená to Doris (if one is excluded from the Eastern route via Thessaly) is only possible for pack-horse caravans or large bodies of men via Métzovo–Jánina–Arta–Karpenísi. Of the east–west routes in Northern Greece, Kastoría–Koritsá and Kalabáka–Métzovo–Jánina are the easiest. The importance of Métzovo is obvious; it is called the capital of Vallachia, and it is perhaps significant that Trampyae, its ancient equivalent just to the west of the town, is one of the few Pre-hellenic place-names in Epirus.[1] The dominant feature of the Pindus range, then, is the plain of Métzovo, on the ancient Mt. Lakmon, which forms excellent pasturage for the summer flocks, and which makes the passage from Macedonia to Métzovo as easy as the direct passage due south from Métzovo to Stratus is hard (cf. *supra* p. 140 and note 2).

As these conclusions rest in part on my own observations and may be considered contingent upon present-day conditions I shall support them by a brief reference to the routes used in earlier times. The Via Egnatia and the Kastoría–Koritsá passes are illustrated by the campaigns of Sulpicius in 200 B.C. against Philip V of Macedon. Invading Macedonia by the Via Egnatia route he ravages Eordaea (the region round and south of Lake Ostrovo),[2] enters Elimiotis and passes on to Orestis where he captures Celetrum (= Kastoría), and taking Pelium retires to Apollonia. Pelium is described as *opportuna sita ad impetus in Macedoniam faciendos* (Livy xxxi, 40); its exact position is disputed,[3] but it certainly lay on the Kastoría–

[1] Cf. for other place-names Fick, *Vorgriechische Ortsnamen* p. 84, and *A.J.A.* xxxii, (1928) Pl. 1, p. 146. The most interesting are Θύαμις (modern Kalamás), the main central Epirus route to the Ionian Sea, and Πίνδος. Κάδμος should be withdrawn from *A.J.A.* as obviously added to deck the Roman localisation of Aeneas' wanderings in the plain of Phoenice. Κόσσος (Carapanos *op. cit.* I, p. 53 no. 5 should read ἀγ Κόσσῳ) must be added.

[2] Fixed by Strabo vii, 7, 4 describing the course of the Via Egnatia; cf. Wace in *B.S.A.* xviii, p. 167.

[3] Wace, *ibid.* p. 168, suggests Pliasa between Kastoría and Biklishta; but it seems possible that Koritsá may provide the site.

Koritsá route.[1] Consideration of the passes through Métzovo can be concluded by reference to the campaign of 198 B.C.[2] Philip V, defeated at the Aoi Stena (Tepeléni–Klisoúra), retires up the Aous valley to Castra Pyrrhi (probably = Mesogéphyra) and on the next day reaches the *Montes Epiri interiectos Macedoniae Thessaliaeque* (*ingens iter sed metus urgebat*) and the plain of Métzovo—*campos patentes aquasque perennis*. Here he camped for several days in doubt *utrum protinus in regnum se reciperet, an praeverti in Thessaliam posset*, and decided on the latter course to arrive at Tricca (Tríkkala). Flamininus meanwhile, unable to follow the wild Aous route (*per ipsas angustias quas inter valle se flumen insinuat*), crossed the Pindus range into Thessaly by marching South into Epirus and reached Phaloria and Aeginium (by Kalabáka); his convoys were sent to Ambracia and thence supplies transported to him at Gomphi (by Mouzáki), *et est iter a Gomphis Ambraciam sicut impeditum ac difficile ita spatio perbrevi*—the supplies take a few days to arrive. Thus Philip on the Métzovo plain hesitates between pass 3 and pass 4, Flamininus uses pass 4 from the Epirus end at Jánina, and his supplies come by pass 8; the last is the only one stated to be difficult.[3] Military operations are less obliging for pass 5; possibly this route was envisaged by Aulus Hostilius (Polyb. xxvii, 16), and a pass further south from Karpenísi to Stratus was used by Antiochus' reinforcements (Livy xxxvi, 11); but the best evidence is supplied by the Hyperborean route[4] from Dodona to Delos via the Maliac gulf.

Our contention, that the route from Macedonia to Stratus in Aetolia passing west of Thessaly must pass through Epirus, is fortified by the winter campaigns of Perseus in 169 B.C. (Livy xliii, 21). Marching at full speed from Elimea via Mt. Citium and the *templum Jovis Nicaei*, he arrives at the Arachthus river to find it uncrossable; he builds a bridge and by a long day's march arrives close to Stratus and encamps on the Inachus river. He returned later by the same route, losing many *iumenta* through the

[1] Cf. Plut. *Titus* 3 where it is suggested to Flamininus that he could turn Philip's flank at the Aoi Stena by invading Macedonia via the εὔπορον ὁδὸν καὶ ῥαδίαν διὰ Δασσαρητίδος; it is possible that the Koritsá-Kastoría route is meant, for the Roman settlement of 229 shows that Dassaretis was on the western side of Pindus as well as possibly on the eastern (cf. Wace, *ibid.* p. 176).

[2] Cf. Livy xxxii, 12 ff. for Philip's retreat.

[3] There are, of course, many other instances. We may mention, for pass 3 Thuc. i, 136, Themistokles from Molossia to Pydna with traders for guides; Thuc. ii, 80, 7, help from Perdiccas for Ambraciote campaign against Stratos. For 2 cf. *e.g.* Livy xxix 12, from Macedonia to Phoenice (near Santa Quaranta); Polybius xxvii, 16, Perseus finds Aous bridge held on his way to Molossia (*i.e.* probably by Mesogéphyra). For pass 4 cf. Caesar *B.C.* iii, 79, from Apollonia via Epirus to Aeginium. For pass 8 cf. Livy xlii, 55, from Ambracia to Gomphi—*asperi ac prope invii soli cum ingenti difficultate parvis itineribus aegre Gomphos pervenit*; Dionysius Calliphontis 24 reckons the last pass as 3 days. For pass 9 cf. Livy xlii, 53, and xliv, 2; Hdt. vii, 173, 4, κατὰ τὴν ἄνω Μακεδονίην may mean this pass.

[4] Hdt. iv, 33; Callimachus, Delos, 284 ff. Cf. below.

inclemency of the weather. As the crow flies, the shortest route would have been down the Achelous valley or via Gomphi to Stratus, but it is clear from the crossing of the Arachthus that Perseus had arrived on the western bank of the Arachthus river, *i.e.* he used the Métzovo–Jánina pass until the southern bend of the Arachthus, and crossed between there and Ambracia.[1]

We may conclude our geographical summary by considering the north and south connections of Epirus. From S. Illyria the entry into Epirus (the northern boundary being the Aous) can be made by two routes easily defensible but not difficult to use, (1) via Tepeléni (Antigoneia), (2) via Mesogéphyra (cf. fig. 7); the Roman road Apollonia–Dodona–Actium (for Nicopolis)–Achelous–Euenus–Delphi used the former route,[2] and Philip covered the latter by his position at Aoi Stena. S. Illyria differs from Epirus in its terrain; large maritime plains (Mouzakía and Malakástra) and rivers running East to West as opposed to the inland plains of Epirus (Gyinokástro and Jánina) and rivers running often N. and S. (Aous, Cocytus, Acheron, Virós, Arachthus, Inachus, Achelous); culturally Epirus was not, and is not, closely connected with Illyria.[3] For Epirus–Macedonia we may quote a Roman consul: *minima accessio semper Epirus regno Macedoniae fuit et hodie est* (Livy xxxi, 7). This is also true in the geographical sense; routes are not difficult, the terrain (*e.g.* upland plains and narrow valleys) and, as a result, the culture, have always been similar,

[1] While the cardinal point is clear, there is uncertainty concerning the northern half of the route followed by Perseus. The inscription found by Wace and Thompson (*B.S.A.* xvii, pp. 193 ff.) proves that Elimea included the Haliakmon valley down to Velventós, *i.e.* controlled the northern end of the Volustana pass at Sérvia (pass no. 9); it probably included Kozáne, and may have extended as far up the Haliakmon as Grevená. It is beyond the scope of this paper to discuss the localities of Elimea, Orestis, Parauaea, Paroreia, and Tymphaea; my conclusion is that Elimea and Orestis shared the upper Haliakmon; Parauaea must be the area round the upper Aous (cf. Steph. Byz. *s.v.*; Plut. *Greek Questions* 13), and Parorcia the area round the upper Arachthus (cf. Strabo vii, 7), while Tymphaea extended from the sources of the Peneius and the Velemíshti region to Aeginium (by Kalabáka). For the view that Parauaea represents the Haliakmon valley by Grevená cf. Wace *B.S.A.* xviii, pp. 181 ff. Alexander's march (Arrian I, vii, 5) from Eordaea to Pelinnaeum clearly crossed the Métzovo plain, where I should hold Parauaea and Tymphaea touched (*i.e.* = Arrian's words παρὰ τὰ τῆς Στυμφαίας καὶ Παραυαίας ἄκρα).

[2] Cf. Miller, *Itinera Romana* p. 559. The Roman coast road Oricum–Buthrotum–Actium is very difficult; cf. Caesar *B.C.* iii, 6; the difficulty is due to the mountainous nature of the Epirote coast. For Tepeléni cf. Polyb. ii, 5–6, Scerdilaïdas from Illyria to Phoenice via Antigoneia.

[3] In modern Albania the Greek population has remained strikingly distinct from the Albanian; the former is limited to the Acroceraunian coastal range, and hill villages from the west side of the Gyinokástro plain to the hill villages on the west side of the Aous (Voioúsa). The coastal plain of Boutrínto is Albanian. This division according to terrain recurs in Greek Epirus. The situation has caused the frontier commission considerable embarrassment.

while they are both shut off by mountain barriers from contact with South-eastern Greece. This similarity accounts for the participation of the Parauaei, the Orestae, and even Perdikkas in the Ambraciote expedition of 429 B.C.; for the decision of the Roman commission after the Macedonian wars to form a fourth division of Macedonia comprising Upper Macedonia, Atintania (west of Pindus) and Tymphaea.[1] Though the route Janina–Kalabáka is easy, the relationship of Epirus and Thessaly is less close.[2]

For Epirus–Acarnania in addition to the Actium–Leucas coast-route we have the strikingly easy route from Limnaea (Keravassará) down a wide valley plain to Stratus on the Achelous.[3] The importance of this route of invasion from northern to southern Greece is as great as that via Thermopylae, the flanks of the Pindus range stretching down to the coast in either case; both Philip and Demosthenes saw the vital importance of Ambracia, the western Thermopylae, in 343 B.C., when the former wished to secure Naupactus, while Alexander took steps first to secure the western approach into Greece. And in the settlement after the Greek War of Independence the frontier gave this key-position to Greece.

The conclusions arrived at in this section can best be seen by glancing at fig. 7. Having studied the practicability and the use made of these routes in classical and modern times, we can safely apply our conclusions to the Bronze Age, which enjoyed a large population and considerable culture in Thessaly and S. Greece. Similarly our study of the geographical affinities of Epirus and its cultural connections explain its participation in the Macedonian culture of the Bronze Age. We shall now turn these conclusions to bear on the Dorian invasion.

C. The Literary Evidence for the Dorian Invasion.

We shall here limit ourselves to the main and more trustworthy evidence from literary sources; the fact of such an invasion is now widely accepted.

The Homeric evidence is valuable, because it is now generally conceded that the Dorian peoples were situated in an area outside Achaean suzerainty but close to the bounds of Achaean Greece (Achaean solely in the sense = Greece known to Homeric epic); two areas fulfil these con-

[1] Livy xlv, 29–30: frigida haec omnis diraque cultu et aspera plaga est. Strabo VII vii, 8: Μολοττοί τε καὶ Ἀθαμᾶνες καὶ Αἴθικες καὶ Τυμφαῖοι καὶ Ὀρέσται Παρωραῖοί τε καὶ Ἀτιντᾶνες, τραχεῖαν οἰκοῦντες χώραν, εἰσὶ . . . Ἠπειρῶται; some also assert that Epirus as far as Corcyra is Macedonian, αἰτιολογοῦντες ἅμα, ὅτι καὶ κουρᾷ καῖ διαλέκτῳ καὶ χλαμύδι καὶ ἄλλοις τοιούτοις χρῶνται παραπλησίως. For the localities mentioned cf. p. 146 note 1.

[2] Jason of Pherae, who expanded beyond Thessaly, is said in a laudatory passage (Xen., *Hell.* vi, 1, 7) to have had some control over Alketas of Molossia, defined as his ὕπαρχος; the nature of this control may be judged by the freedom of Alketas in joining the Second Athenian Confederacy.

[3] This route was used often; cf. *e.g.* Thuc. ii, 80, 8, iii, 10, 6 and Polyb. v, 3, 6.

ditions, Macedonia between Thessaly and Thrace, and, a fact hitherto little noted, Epirus between Thessaly and the realm of Odysseus. There is no doubt about Macedonia; let us consider Epirus.

In the *Iliad* we have two references to Dodona; the prayer of Achilles (xvi, 233 ff.):

> Ζεῦ ἄνα, Δωδωναῖε, Πελασγικέ, τηλόθι ναίων,
> Δωδώνης μεδέων δυσχειμέρου· ἀμφὶ δὲ Σελλοὶ
> σοὶ ναίουσ' ὑποφῆται ἀνιπτόποδες χαμαιεῦναι.

and the reference in the Catalogue (ii, 749) to Gouneus of Kyphus, who led twenty-two ships:

> τῷ δ' Ἐνιῆνες ἕποντο μενεπτόλεμοί τε Περαιβοί,
> οἳ περὶ Δωδώνην δυσχείμερον οἰκί' ἔθεντο,
> οἵ τ' ἀμφ' ἱμερτὸν Τιταρησσὸν ἔργ' ἐνέμοντο.

Theories regarding a second Dodona in Thessaly [1] rest on no evidence except the theory of Strabo and others using the same sources as ourselves. As we know Dodona was occupied from earlier times [2] and lies close to an easy route, we need harbour no doubts as to its identification. The epithets fit, for Dodona is 'far away' and 'wintry,' and the Ἐνιῆνες 'round Dodona' never occur again in Homer. As the Περαιβοί march with the Enienes dwelling west of Pindus, we should expect to find their habitat covering the area of the passes implied by their juxtaposition; the western plain of the middle Peneius is occupied by the Asclepiads of Trikka (Tríkkala) and Titaressus has been identified by Allen [3] with an upper tributary of the Peneius, almost certainly the modern Mikánis rising at Velemíshti. We may then place the Perhaebi in the upper Peneius waters, on the exit of two passes, one leading to Dodona, the other to Macedonia (no. 4 and no. 7). Other Pindus peoples are the Aethices (ii, 744) on the N.W. boundary of Thessaly (according to Allen by Tirnavos = pass no. 6),[4] while Polypoetes (ii, 739) held Oloösson (by pass no. 9) and the Dolopes (ix, 484) on the S.W. borders of Peleus' realm are usually situated on the upper Spercheius (at the exit of pass no. 5).[5]

[1] Cf. T. W. Allen, *The Homeric Catalogue of Ships*, pp. 121–122. Is Ἰθώμη κλωμακόεσσα to be placed by the famous Meteóra pinnacles (near Kalabáka)?

[2] In addition to the archaeological evidence (p. 131) cf. *e.g.* Hdt. ii, 52 for Greek tradition.

[3] Allen, *op. cit.* p. 133 quoting Leake, *Travels in Northern Greece* i, 415; iv, 278 for the phenomenon mentioned by Homer at the junction of the Titaressus and Peneius. Further, the epithet ἀργυροδίνης can only refer, whatever the meaning of ἀργυρο-, to the upper Peneius, the Tempe region being on other grounds out of the question.

[4] Later situated on eastern slopes of Pindus North of the Peneius valley; for references cf. *op. cit.* pp. 129–130.

[5] Cf. *op. cit.* p. 112.

Thus, with the exception of the Enienes (cf. *infra* for the ethnic), Achaean Greece stopped East of Pindus but occupation extended to the mouth of the east-west passes. The contingent of Gouneus presupposes that the Zygos pass (no. 4) was in use; can we say the same of the Tymphrestus pass (no. 5)? Amber in Achaean times came from the north by the legendary route of the Hyperboreans, which we have seen above used pass 5; the early geometrising ware at Lianokládi was held by Wace and Thompson [1] to have been due to the influence of immigrants from West Greece over Tymphrestus; finally, the place-names common to the Spercheius valley region and the western end of the pass by Ambracia (some mentioned in Homer, others in later authors) are arresting—Inachus, Achelous and Dryopis are common to both, while in Pelasgicon Argos, Hellenes, and Hellas we have connections with the western Argos (considered an early foundation), Pelasgic Dodonaean Zeus, Selloi or Helloi and Hellopia by Dodona.[2] This evidence must establish the fact of immigration into the Spercheius valley in pre-Achaean times, but the equation Lianokládi immigration = place-names immigration is, of course, a conjecture devoid of evidence. Finally, Homer mentions a movement of peoples from Thessaly into the Pindus hills; the Pheres (*Il.* ii, 743 cf. i, 268) were driven from Pelion to the neighbourhood of the Aethices. The Lapiths too (xii, 128) appear in N.W. Thessaly, while later tradition associated them with the Pheres (or Centaurs). We conclude then that the passes 4, 5, and possibly 6, 7 and 9 had been before and probably were during Achaean times in use.

In the *Odyssey* Dodona and Thesprotia, through which region the oracle is approached from the west, are known as the northern bound of the western Achaean world. Odysseus pretends that the fictitious Odysseus is in Thesprotia and has gone to consult the oracle at Dodona (xiv, 315),

[1] *Prehistoric Thessaly*, ch. xvi for Lianokládi, and ch. xiii for earlier East and West connections. This view has been criticised strongly on archaeological grounds, which are not in my opinion conclusive.

[2] Western Inachus in Hecataeus fr. 72 Jacoby, Eastern in Plut. *Greek Questions* 13 (cf. Halliday *ad. loc.*); western Dryopis cf. Dicaearchus v, 30 p. 459 (ed. Fuhr) by Ambracia and Pliny, *N.H.* iv, 1 by Dodona; eastern Dryopis in Hdt. viii, 31 and Strabo ix, 5, 10 f., the latter adding that Mt. Tymphrestus was once called Dryopikon; the other names need no references. Pelasgikon may have a purely religious sense (this does not invalidate the evidence), but it is interesting to notice Aesch. *Supplices* 245 f. where the realm of the Pelasgi stretches from the Strymon to the west as far as the Perhaebi, the western slopes of Pindus, and the mountains of Dodona. Cf. Hesiod (ed. Rzach) frag. 212. The view held by Ridgeway, *Early Age of Greece*, that the Achaeans came from Dodona is now untenable, but further evidence for east–west connections, which I cannot adduce here, will be found there and also in Thomson, *Studies in the Odyssey*, pp. 125 ff. Ridgeway's theory may be modified to bear the interpretation that the Achaeans bringing a culture from the South were the overlords of an earlier population coming from the West.

and the Thesprotians are his allies against the Taphians (xvi, 427). The Taphians are the bearers of iron (i, 184) and in Thesprotia Odysseus in his fictitious story mentions iron among the gifts given by himself to Pheidon (xiv, 314); as the Taphians cannot reasonably be placed at Taphos inside the realm of Odysseus, they may have held Paxos and Antipaxos as their southern posts.[1] This would account for the relations of Odysseus and the Thesprotian king, supported by the interest in Thesprotia of the Cyclic Epic Poets, especially Musaeus. Otherwise the mainland under king Echetos [2] was a place of dread (xvii, 115 *et al.*) and the Cephallenes (for ethnic cf. *infra*) hold the western fringe of the mainland opposite Leucas (xxiv, 377 and *Il.* ii, 632). The position of Thesprotia is clear when we remember that it is a rich, if small, coastal plain cut off from all connection with central Epirus by mountains; [3] thus Achaean influence was limited to the coast and a pilgrimage to Dodona was a visit to a shrine outside the Achaean realm. On the west coast the Ambraciote gulf forms an interesting gap in the poet's knowledge.

The archaeological evidence confirms the Homeric limits of Achaean influence. Mycenaean pottery is but slightly established, like the authority of Achilles, over North-west Thessaly, and Mycenaean sherds only appear sporadically in Macedonian uplands as opposed to coastal plain-lands; in the south-west, Leucas and the mainland opposite, *e.g.* Astakos,[4] were Mycenaean in culture, but Corfu [5] and Dodona [6] have produced no Mycenaean pottery; to the South, Thermon confirms the Achaean realm round Calydon in Southern Aetolia. As we have shown, the area from Macedonia to Xerakía by Ambracia and to Goúrana on the Acheron inclusive of Dodona retained the Macedonian Bronze Age culture throughout Mycenaen times. Thus Homer and archaeology are mutually corroborative in showing that both Epirus and Macedonia are possible cunabula of the Dorian peoples.

[1] For iron in Homer cf. Myres, *op. cit.* pp. 433 ff., where only one reference and one type of iron are noted; both 'flame-coloured' and 'much-belaboured' are mentioned in the passages quoted above. For the piracy of the Taphians and the possibility of trade passing up the Adriatic Sea cf. Childe, *The Bronze Age*, p. 193. For the location of Taphians suggested, *Od.* I, 259 is favourable, Ephyra being not improbably from the poisons-trade in Thesprotia, as in other passages.

[2] His father was Bouchetos of Bouchetion in Epirus, near Trampyae; cf. Allen, *op. cit.* p. 97.

[3] The Thesprotian plain extends to Paramythía in the north, whence it takes 14 hours over wild and deserted country to reach Dodona; to the east the limit is the splendid gorge of the Acheron, turned by a détour South to the eastern end at Goúrana, and then to the pass over Mt. Olytziká for Dodona in some 18 hours.

[4] Excavated by Miss Benton.

[5] *Pace* Dörpfeld *supra*; for Corcyra = Phaeacia note the Illyricised place-name Βαιακή in N. Epirus, Hecataeus frag. 104. I am indebted to Prof. Chadwick for pointing out to me the significance of this name.

[6] Neither Carapanos nor Evangelides have found any Mycenaean remains.

Bearing this presumption in mind, we may now turn to the evidence for the actual Dorian invasion. The invaders were sufficient in number to flood Western Greece, most of Central Greece, and the whole of Peloponnese save Arcadia, and to stimulate the Ionian colonisation; they were themselves on the move for three generations before they broke through into the Peloponnese (Paus. viii, 5, 6 f.). To later tradition their route is well-defined; further, they are associated with certain preceding tribes of invasion; finally, certain tribes have penetrated into Greece already in pre-Homeric times. In discussing tradition, we shall only deal with the earlier and sounder evidence. Homer (*Od.* xix, 177) mentions Dorians in E. Crete; the Rhodians (*Il.* ii, 653) under Tlepolemos have a three-fold division, and islands including Cos are ruled by sons of Thessalus (*ib.* 679). Their presence is irrefutable: Tlepolemos' wife comes from Ephyra, possibly the Thesprotian capital, and the Thessaloi, we shall see, came later from Thesprotia (cf. *C.A.H.* ii, 528).

Thucydides (i, 12; cf. i, 3; iv, 42) is explicit; sixty years after the fall of Troy the Boeotians starting from Arne (in S.W. Thessaly, *i.e.* Thessaliotis), whence they had been ejected by the Thessalians, entered Boeotia, and in the eightieth year after the fall of Troy the Dorians entered Peloponnese. Whence then came these Thessalians, representing a wave of invasion immediately prior to that of the Dorians proper? Herodotus (vii, 176) informs us clearly of the origin of the Thessalians; invading Aeolic (S.W.) Thessaly, they came from Thesprotia—an area comprising to him Dodona and Southern Epirus as far as Ambracia and Leucas.[1] Unless we reject all literary evidence for the Dorian invasion, we must believe that the first wave of invaders (call them Dorians or Thessalians, as one may prefer) came from S. Epirus via pass no. 4 and pass no. 5 (the latter being more probable on grounds stated below). Not only have we seen that this is geographically possible (*supra* pp. 141 f.), but also, as the Thessaloi do not occur in Homer, they must have then been in either Epirus or Macedonia. The Boeotians also are new-comers in Thucydides' opinion, for he expressly points out that the inhabitants of Boeotia in Homeric times were Cadmeans; their origin, as indicated by Mt. Boeon and other evidence (*e.g.* τριποδηφορικὸν μέλος, p. 162 *infra*), may also have lain behind passes nos. 4 and 5, in Pindus and North-western Greece. If so, we can see in the Boeotians and the Thessalians forerunners of the Dorian invasion, and may term them for convenience spear-head tribes.

The Dorians proper, according to Thucydides, came twenty years after the displacement of the Boeotians by the Thessalians; Herodotus (i, 56) and Pindar (Pythian i, 66) give us clear information concerning the route followed by this πολυπλάνητον ἔθνος. In the reign of Deucalion (*i.e.* at an unspecified early date) they held Phthiotis; in that of Dorus, son of Hellen,

[1] Hdt. ii, 56; viii, 47.

the region under Ossa and Olympus named Histiaeotis, whence they were ejected by Cadmeans and dwelt in Pindus, 'receiving the Macednian name; thence, again, they removed to Dryopis, and from Dryopis ultimately to the Peloponnese, where they received the Dorian name.' Pindar states that 'they took Amyclae, issuing forth from Pindus'; Tyrtaeus (fr. 2) and Thucydides (i, 107) derive the Spartan Dorians from Erineus in Doris.

Certain points in this account of the Dorian tribe's wanderings have been considered difficult to accept; there is, however, no *prima facie* ground for disbelieving the accuracy of folk-memory. And upon investigation we shall find that the account has every claim to probability; we must, of course, bear in mind that Herodotus is speaking of the Dorians proper, that is to say, only one tribe of the many tribes who were engaged in the so-called 'Dorian' invasion and grouped under the ethnic 'Dorian.' Early settlement in Thessaly is in itself probable; whether Phthiotis was their original home or only the earliest remembered stage of their nomadic existence, archaeology has made it clear that Thessaly in prehistoric times was thickly populated and immigrations into Thessaly common; if we desire archaeological evidence for the intrusion of a nomadic people into Thessaly, we may note the settlement of Macedonian peoples in the Early Bronze Age in Central Thessaly and the early appearance of a geometrising culture at Lianokládi, just south of Phthiotis. From Histiaeotis their ejection by the Cadmeans presents a difficulty; that they were ejected is not in itself improbable, but in the addition of the Cadmeans we may see the handiwork of Herodotus, who seems to connect the presence of Cadmeans with his belief that Cadmus and Harmonia fled to Illyria.[1] If we dismiss the Herodotean addition, we can conclude that the Dorian tribe left Thessaly for 'Pindus' before the time of the Homeric Achaean suzerainty of Thessaly. For the credibility of such movement within Thessaly we have already adduced the evidence of the Pheres, recalled by the aged Nestor, and we shall adduce reasons later for believing that in the time of Peleus and Achilles there were still Western Greeks in South Thessaly.

Like the Lapiths, they next go via Histiaeotis to Pindus; the theory that Pindus = the town in Doris is untenable, for not only does it make nonsense of the name Macednian and the next stage of migration to Doris (they are, in fact, already there according to the Doris theory), but it disregards Pindar's evidence that the Dorians 'issued forth' from Pindus (the mountain range, as Pythian ix, 15 shows, naming it as the birthplace of the Lapith king, whose subjects in Homer occupy the N. Pindus range).[2]

[1] Hdt. v, 61; cf. ix, 43; there seems good reason to suspect Herodotus of credulity here, and Thucydides in his careful distinction of Cadmeans and Boeotians may be tacitly criticising him.

[2] Apart from the passage quoted, Pindus occurs twice in Herodotus. He states that the mountains West of Thessaly were called Pindus (vii, 129), and he describes the Pelopon-

In the Pindus range they 'receive the Macednian name,' a phrase which must mean that they were known as Macednoi before they received the Dorian name and that this name was associated with a stay in or near Pindus; as they went to Pindus from Histiaeotis [1] they used the Tirnavos route (pass 6) or Volustana route (pass 9) to the Haliakmon valley near Grevená or Sérvia; near the former lies Bouboústi, where one phase of our Macedonian culture arrived, probably from Thessaly, in 1300 B.C.[2]

They next move from the Haliakmon valley (whence Macedonia, like the Dorians at this stage, appears to have received its name[3]) to Dryopis; Herodotus makes the identity of Dryopis clear in viii, 32 where he states that the region in Doris between Malis and Phocis was in antiquity called Dryopis. Thence they reach the Peloponnese and receive at last the Dorian name. We shall now turn to the western wave of invasion, bearing in mind that we have yet to bring the Macednoi-Dorians from Pindus to Dryopis. Having seen no reason to doubt Herodotus' account so far, we may suppose his evidence more reliable still for the last phase.

Thucydides and Herodotus are not concerned with the western branch, but Pausanias (*loc. cit.*) says the invaders came in ships to Rhium, presumably crossing the Corinthian gulf, and invaded Elis. They apparently did not bear the Dorian name until fourth-century authors pressed the identification (Pindar, Pythian x, 1 f. conceded the Dorian name to the Thessaloi of the eastern wing at an earlier date), but there is no doubt

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nesian members of the fleet at Salamis (viii, 43) as 'of the Dorian and Makednian race, who had emigrated last (ὕστατα ὁρμηθέντες) from Erineus, Pindus, and Dryopis.' The former passage strengthens our contention in shewing that Herodotus used the name Pindus in the sense of a mountain chain; the latter passage—Erineus is a town in Doris—refers to the Pindus in Doris, and may appear to weaken our case. But a comparison of i, 56 with viii, 43 shows that Herodotus, in the former case, must mean the range: his actual words are οἴκεε ἐν Πίνδῳ Μακεδνὸν καλεόμενον· ἐνθεῦτεν δὲ αὖτις ἐς τὴν Δρυοπίδα μετέβη, καὶ ἐκ τῆς Δρυοπίδος οὕτως ἐς Πελοπόννησον ἐλθὸν Δωρικὸν ἐκλήθη. ἐνθεῦτεν δὲ αὖτις must mean that Pindus is the penultimate stage, and therefore not in Dryopis, while the οὕτως stresses the fact that Dryopis *was* the ultimate stage. When, therefore, Herodotus says that the Peloponnesian Dorians came ὕστατα from Erineus, Pindus, and Dryopis, he is referring explicitly to the ultimate stage, the Dryopis of i, 56, and means the Pindus of that district; for the river (or town) of the name of Pindus was, if not actually within the subdivision Dryopis of the canton of Doris, at least closely adjacent. Cf. Pindar, *Pyth.* i, 66, Πινδόθεν ὀρνύμενοι: Schol. *ad loc.*, Πίνδος Περραιβίας ὄρος.

[1] If Herodotus is supposed to err in placing Histiaeotis in N.E. instead of in N.W. Thessaly, the route is equally good.

[2] Heurtley *B.S.A.* xxviii, p. 177, chronology fixed by a Mycenaean sherd; in this important article he suggests the identification of the Bouboústi people with the Dorians.

[3] Hdt. viii, 137 representing Macedonian folk-memory. The claim of the Argeadae, that they came from Peloponnesian Argos, should probably be referred to Argos Oresticum; cf. Appian, *Syr.* 63 and Strabo vii, frag. 11. F. Geyer, *Makedonien bis zur Thronbesteigung Philipps II*, p. 12, states without adducing evidence 'der älteste Sitz der Makedonen war aller Wahrscheinlichkeit nach die Landschaft Orestis.'

that within the three generations of invasion a people invaded Aetolia and Elis from the North.[1]

This completes the list of invaders and migrants—of unknown date, Herodotus' pre-Macednian-Dorians; in the time of Dorus, Herodotus' Macednian-Dorians; within the memory of Nestor, Lapiths and Centaurs; after the Trojan War, the Thessaloi and Boeotoi, followed by the Dorians of Thucydides, who in Herodotus reach Dryopis in Doris and finally the Peloponnese to be called there Dorians; and about the same time as the last, a nameless people coming via Aetolia to Elis. As we should expect, the Dorians of Herodotus, whose movements in Thessaly and habitation of the tiny area Dryopis preclude anything but a relatively small tribe, have gathered a number of migrants sufficient to flood the Peloponnese and to be awarded by scholars the general nomenclature of 'Dorian,' upon which the division of later Greece into Ionians and Dorians was based. Additional names are supplied by tribes of the type which I have named spear-head—the Dryopes, the Aenianes, and the Dolopes.

We must now return to the question of routes,[2] in order to explain the stage from Pindus to Dryopis. In the first place we must be clear that the Dorian invasion did not take place in a day, nor did they march like the soldiers of Perseus; we shall not err if we compare them to their nearest modern parallel, the Vlachs, and picture them moving slowly along defined routes in country capable of maintaining their flocks and families at different seasons of the year. Under these conditions how did the Macednoi reach Dryopis in Doris from Pindus and the Haliacmon valley? We have already studied the Pindus routes showing that neither the spine of Pindus nor the trough of the Achelous present possible routes, while it is an obvious absurdity to suppose either that the Dorians in the general sense lived throughout the year on the tops of Pindus or that they came directly south from Macedonia without a halt in some habitable country. As we shall see later, the evidence of dialect distribution excludes Thessaly from consideration as a halting-place. In that case, they either used routes 3 and 5, or else 3 and 4; that is, they went from Grevená to Jánina and thence via Ambracia to Karpenísi, whence the step is easy to Dryopis via the head-waters of the Asopus and the pass used later by a more mobile force of invasion, or in the second case they went from Grevená via Jánina and Métzovo into Thessaly; on other evidence we can rule out the second alternative as a main route of invasion.[3] As we have been at pains to point out, the journey from Grevená to Stratus or Ambracia keeping west of

[1] Cf. *C.A.H.* ii, 530 f.

[2] Cf. *supra*, pp. 141 f. and fig. 7.

[3] This second route would bring the Thessalians and later the Dorians into Central Thessaly, whereas the Thessalians are associated with Arne on reaching the plain, and the Dorians with Doris. So far as the literary evidence alone goes, this second route can only have been subsidiary.

Thessaly involves entry into Epirus at the Jánina plain; and, as Epirus and Dodona by the Jánina plain were occupied earlier than the time of Dorian invasion, we must suppose that this entry of the Dorian tribe displaced other peoples. These must be the other users, as we have seen above, of the Tymphrestus route (no. 5),—the Thessaloi, who are expressly said to have reached Arne from Thesprotia just before the Dorians came; the Dorians themselves later used the same route and carried with them or displaced other minor peoples, the Aenianes, who in Achaean times dwelt round Dodona, the Dryopes and the Dolopes. Again one must remember that the movement covers many years; there must have been a halt in Epirus, and the penetration that brought the Dorian tribe to Epirus probably used other minor routes in the course of permeation; similarly both Thessaloi and Dorians, before they reached the upper Spercheius, must have infiltrated slowly into South Epirus, and the Parachelois, which is habitable by moving tribes only south of the latitude of Ambracia. But though infiltration may use lesser routes to a minor degree, it will follow the main routes, set by geographical conditions, in its general course.

For the western wave of invasion the route is obvious. As we have seen above, from S. Epirus via the western Thermopylae, Ambracia, the route to the Achelous and the Corinthian gulf is easy; the infiltration prior to the crossing of the Gulf must have centred round the Ambracia–Keravassará–Stratus route and the lower Achelous.

We find ourselves led to the conclusion that, if the most reliable literary evidence is of any worth, the immediate centres of dispersion presuppose an earlier concentration in Epirus; only on this hypothesis can the Dorian invasion in the general sense and the geographical description of the wanderings of the Dorians proper be accepted as lying within the bounds of possibility.

As we saw in the first half of this section, the evidence of the Homeric poems shows that Macedonia and Epirus were unknown to the Achaean world: with the exceptions—Dodona and Enienes (the hiatus reaching Thermon in Aetolia), the coastal peoples in the west named Thesprotoi and Cephallenes, and the inland peoples in the east named the Aethices, Perhaebi, Enienes, and Dolopes, marking the outer fringe of Achaean influence from the Thessalian side. While the archaeological evidence shows a homogeneous culture with local variations coinciding with the non-Achaean area and a Mycenaean culture weak or absent on the outer fringe of the Achaean area, most notably at Dodona in the case of the Enienes.[1] The literary evidence and the archaeological evidence then are mutually corroborative.

[1] Evidence from archaeology is lacking for the other border peoples except for the Kephallenes, who must have held Astakós, where Mycenaean pottery has been found.

D. Literary and Dialect Evidence posterior to the Dorian Invasion to show the North-western Connections of the Dorian Peoples.

This section like the last must be limited to the salient points of the invasion. I shall deal with the nature of the Dorian name, the later position of the spear-head tribes, the evidence of certain cults, and the evidence of dialect.

The early Dorians,[1] after the long period of upheaval prior to the settlement of each tribe, distinguished three main tribes—the Hylleis, Pamphyli and Dymanes. Of these Pamphyli is obviously used of the nondescript migrants, while Dymanes and Hylleis represent two main tribes or groups of tribes. The Hylleis are the Dorians *par excellence*, brought by Hyllus to the Corinthian Isthmus,[2] and the Dymanes must represent the other main stream of invasion, the western group via Rhium. The evidence for identifying a distinct western group is primarily dialectic, but the ethnic -anes has an interesting distribution. It is peculiarly common in North-west Greece; in Aetolia we have Eurytanes, in Acarnania the Acarnanes and Eitanes, in Epirus the Athamanes Atintanes Aenianes Arctanes and Talaeanes,[3] while to the north we have Enchelanes in S. Illyria, Agrianes in N.W. Macedonia, Aeane in the upper Haliacmon valley near Grevená, and to the west the Kephallanes in Kephallenia. Two of these tribes have appeared earlier in this article; the Aenianes in the Ionic form Enienes and the Kephallenes or Kephallanes lie in Homer on the fringe of the Achaean world, and we must add a third inside the Achaean realm, the Hellenes or Hellanes and Panellenes or Panellanes (these are the only ethnics in -enes in either Trojan or Greek catalogue). Now the distribution of the tribal ethnic in -anes supports the view that the

[1] Tyrtaeus frag. 1 ed. Diehl dates the triple division in the case of Sparta to the seventh century. Cf. Powell and Barber, *New Chapters in Greek Literature*, III, p. 63. For Sicyon and Argos before the time of Cleisthenes cf. Hdt. v, 68; Dymanes occur in inscriptions from Thera (*I.G.* xii, 3, 337) and Cos (Paton-Hicks, *Inscriptions of Cos*, 367); as Thera was colonised from Sparta, where the tribal system was abolished by the *Eunomia*, the tripartite division probably dates from the foundation of the colony. The mythical Dyman was invented to give the Dymanes an ancestor; cf. Steph. Byz. *s.v.*, Schol. Pind. Pyth. v, 92, οἱ Αἰγιμίου παῖδες Δύμας καὶ Πάμφυλος συγκατῆλθον τοῖς Ἡρακλείδαις. Further references are given by Szanto, *R.E. s.v.* Dyman, Dymanes. It seems probable (cf. *C.A.H.* ii, 528) that the epithet τριχάϊκες used by Homer of the Cretan Dorians refers to the tribal division of Dorian peoples; Hesiod's explanation of the term (Loeb ed., fr. 8), whether correct or not, shows that a threefold division was known in his time.

[2] The connection of Hyllus with the Hylleis in Central Illyria and Hyllinoi by the Naro I consider far-fetched; if there is any connection, Corinthian influence explains it.

[3] The name Talaeanes appears in an inscription only (Carapanos *op. cit.* inscr. no. 13); no doubt there were others. In male names recorded in Epirote inscriptions the male nom. in -αν or -ην is very common. From the Spercheius valley we may add Κυλικρῆνες (*F.H.G.* iv, 49). For Zeus, Apollo and Pan cf. p. 158 note 7. The Paean song was associated with Macedonia, and Herodotus i, 139 tells us that the Dorians called the letter sigma σάν.

Dym-anes came from Epirus or the north-west, and it also suggests that they brought the name with them; unlike the Dorians proper they received no second name. In that case it is probable that the tribes with this ethnic mentioned by Homer were of the same group. We should naturally suspect that the migratory folk on the borders of the Achaean realm, speaking a Greek dialect not unintelligible in Homeric times, should appear. The position of the Enienes and the absence of Mycenaean pottery at Dodona, the position of the Cephallenes, and the dread of the mainland in the *Odyssey* are explicable on the ground that they were Western Greeks. That the Hellenes proper came from Dodona in the west was the view of Aristotle,[1] and we have no grounds for denying it; like the Graikoi from Dodona, their name was applied to the other invaders who came with them or subsequently.[2] We have already seen reason to believe in an invasion of Thessaly from the West before Homeric times.[3]

Of the spear-head tribes the Dryopes gave their name to Dryopis, an area variously located in the region round Ambracia (cf. p. 149 note 2), the Tymphrestus mountain, the Herodotean Dryopis, and later the highlands round Parnassus; ejected by Herakles and the Malians, they colonise Karystus, Hermione, and Asine.[4] The Dryopes remembered their origin, for Pausanias records sanctuaries of Apollo and Dryops erected in memory of their paternal shrines on Parnassus (iv, 34, 6); their ethnic suffix -opes, like that of -anes, is especially common in Epirus, the vowel fluctuating between omega and omicron (*e.g.* Dolopes, Hellopia,[5] Mt. Meropum, Kassopoi, Kariopes, Koilopoi, and Deuriopes adjoining the Bryges in N.W. Macedonia). The Dolopes have a similar history to the Dryopes; known to Homer as holding the upper Spercheius, their name stretches back into the Parachelois and forwards to Scyrus; they were also members of the Delphic Amphictyony.[6] The Aenianes are still more instructive;

[1] Meteor. I, 14, 532A. Thucydides i, 3, 3 dubs the followers of Achilles 'the first Hellenes.'

[2] The earliest use of the term Hellenes and Panhellenes in a wider sense may be inferred from Hesiod *Eoiae* fr. 18 (Loeb ed.): Ἡσίοδον ἤδη εἰδέναι καὶ Ἕλληνας λεγομένους τοὺς σύμπαντας καὶ Πανέλληνας; for Sparta cf. Ζεὺς Ἑλλάνιος in the Rhetra, Plut. *Lycurgus* 6. For the Graikoi see *R.E. s.v.*

[3] Cf. evidence of place-names quoted above p. 149. There may have been others, *e.g.* the Myrmidons who fought in Doric fashion (ἀγχιμαχηταί), cf. *Classical Journal* ix, 9, p. 589.

[4] Hdt. viii, 43, 46, 73; Thuc. vii, 57; Apollodorus ii, 7, 7; in Hdt. i, 146 they are included as non-Ionians in the Ionian migration in company with Cadmeans, Phocians, and Molossians; to Homer they are not known. They recur in Elis (Steph. Byz. *s.v.* Νεμέα). They were not Dorian, cf. Hecat. fr. 119 (ed. Jacoby) considering them pre-Hellenic.

[5] Hellopia has a distribution coincident with the Dorian invasion; in the west there are Hellopia next Dodona and Ellopium on Lake Trichonis in Aetolia; in the east, Hellopia on the Thessalian coast, in Dolopia, in Euboea, and at Thespiae in Boeotia.

[6] Thuc. ii, 102, and i, 98.

as the Enienes they dwell round Dodona in the *Iliad*, and Herodotus (vii, 198), also using the Ionic form, places their habitat at the sources of the Spercheius. Plutarch knows still more of their wanderings; in his *Question* τί τὸ πτωχικὸν κρέας παρ' Αἰνιᾶσι; he says that they were ejected from the Dotian plain by the Lapiths to join the Aethikes, whence they occupied the northern district of Molossia (Parauaea), before removing to Cirrha and finally settling in the country about the Argive Inachus, from which they expelled the Inachians and Achaeans.[1]

In memory of this they pay sacrifice to Apollo and give an ox to Zeus. This last detail is explained by Plutarch in his *Question*[2] about the Aenianian maidens; they take the ox to Cassiopaea, where they had sojourned during their passage between Molossia and Cirrha.[3] Aristotle[4] has a story of an ancient inscription interpreted by the Thebans to whom the Aenianes brought it from their land; they interpreted it to mean that Herakles had given them their land in memory of their friendship 'under the shady oak'; in view of the fame of the Dodonean oak and Theban relations with Dodona, Epirus must be meant. Finally, in Heliodorus the Aenianes are said to send at the time of the Pythian festival a θεωρία to Neoptolemos at Delphi, whom together with Achilles they claim as Aenianians; themselves they assert to be the noblest of the Thessalian tribes and actually Ἑλληνικόν, a claim admitted by the other Thessalians.[5]

From these Aenianian myths, which have every sign of folk-memory and religious conservatism,[6] two points arise. The worship of Zeus is usually considered Dorian, and it has been suggested that Zeus of Olympia originated from Zeus of Dodona, brought by the western stream of invasion. Apollo[7] too is associated with early Dorian religion, and the route of his

[1] Plut. *Greek Questions* 13 and Halliday *ad. loc.* Strabo ix, 5, 22 gives a rationalised (and so suspicious) alternative route. They were an Amphictyonic people.

[2] Plut. *Greek Questions* 26 and Halliday *ad loc.* [3] *Ibid.* 26.

[4] *Mirab. Auscult.* 133; Herakles is returning after his quest for the cattle of Geryon, which was sometimes located in S. Epirus. For the Dotian plain see above and Steph. Byz. *s.v.* Ἄμυρος.

[5] Heliod. ii, 34. Mr. Bachtin kindly drew my attention to this reference. Cf. Scymnus, 615.

[6] The Vlach memory of Rumanian origin is a striking parallel, if they are indeed Roman colonists expelled from Dacia.

[7] Cf. Myres, *op. cit.* p. 169 and p. 563 for Apollo; *C.A.H.* ii, p. 531 for Zeus of Olympia; Paus. x, 12, 10 Dodona origin of Ζεὺς ἦν, Ζεὺς ἐστι, κτλ. It is also interesting, in view of the West-Greek origin of the ethnic -αν, to note that the Doric form of Zeus was Ζάν, the Boeotian Δήν, and the Cretan on coins ΤΑΝ; Apollo's cult name, especially in Thessaly, was Παιάν. The worship of Pan, who shares this ethnic form, was said by Herodotus ii, 145 to have commenced after the Trojan War; he does not occur in Homer, and his mortal grandfather in the Homeric Hymn to Pan is Dryops. Finally we have Poseidon, in Dorian inscriptions Ποτειδᾶν and in early Doric Ποτιδᾶν; Odysseus goes to Epirus to appease Poseidon, cf. infra p. 161 and note 3, and inscriptional evidence shows that Poseidon-worship was popular in Epirus. There is not space here to discuss the interesting question whether Poseidon in Epirus was a horse-god or sea-god.

arrival into Greece in the Dorian–Pythian part of the Homeric Hymn to Apollo [1] brings him along the route, which is now familiar in the Dorian context; from Olympus to Pieria, then traversing Lacmon and through the Aenianes and Perhaebi to reach Iolcus and Euboea, and thence to Thebes. The route [2] is familiar; and we may note the oracle shrine of Apollo in Epirus,[3] considered ancient by Farnell.

The second point is the claim of the Aenianes as truly Ἑλληνικόν to Achilles and their cult of Neoptolemos at Delphi; the mention of the tribe in Homer as dwelling round Dodona, and the origin both of the term Ἑλληνικόν (from Dodona) and of their neighbours the Thessaloi (from Thesprotia) explain without further ado the basis of fact underlying their claim to the Hellenic name; the Ainianian claim to Achilles rests either on the prayer of Achilles to Dodonaean Zeus or on the supposition that the Aenianes were in some manner located in Homeric Hellas.[4] For the second alternative we have already adduced evidence to show that there probably were Western Greeks (*i.e.* Dorian in the later sense of the word) in Achilles' realm; the Aenianes were associated with the Dotian plain in earlier times, and those not ejected by the Lapiths may have remained in Thessaly and been among Achilles' subjects.

Finally, was Achilles a Western Greek by origin,[5] or was he adopted [6] by the Dorian invaders with Neoptolemos? A conclusion is impossible, but the distribution of Achilles-Neoptolemos cults is, for the theory of Western origin, interesting. Apart from Thessaly, Achilles was worshipped in Epirus under the name Aspetus,[7] and the Molossian royal house claimed descent from Achilles—a claim resting on early evidence, which located

[1] *Hymn to Apollo*, l. 315 f. Cf. Sikes and Allen *ad. loc.*, where the reading Λέκτον is retained; no such name save in Asia Minor is known and Baumeister's emendation Λάκμον is convincing. Otherwise the sound geography noted by the authors for the remainder of the route must lapse, unless there was a Λέκτον on Lakmon. The poem is dated to the early sixth century by F. Jacoby, *Die homerische Apollonhymnus* p. 53, who recognises the element of cult-tradition from which its material is drawn, and by Dornseiff, *Die archaische Mythenerzählung*, p. 14. Jacoby, p. 59 considers this route 'Erfindung der Delphers,' but it is more likely to be the early tradition preserved at Delphi; he does not explain the devious route from Olympus to the Maliac gulf.

[2] To avoid repetition *ad nauseam* of this route I may mention other instances here: Orestes visiting Dodona from Argos stops at Phthia, Eurip. *Andromache* 886; Io from Argolid to Adriatic via Epirus, Aesch. *Prom.* 848. Apollo and Dorians, cf. *C.A.H.* iii, 624.

[3] Aelian. *Nat. Anim.* xi, 2.

[4] It is, however, noteworthy that the Aenianes in Heliodorus do not quote Homer in support of their claim, as one would expect if the claim was a quasi-logical deduction from Homeric evidence.

[5] His prayer to Zeus of Dodona is interesting in this context; he traced his line to Zeus, and ancient tradition says he was descended ἀπὸ δρυὸς ἢ ἀπὸ πέτρης. Cf. Schol. to *Iliad* xxii, 126 and *Hermes* xix, p. 544. Are Zeus and the oak both from Dodona?

[6] Cf. the Albanian adoption of Alexander the Great, figured on the *lekj* minted by the Italians, whose political motives obscure the source of adoption.

[7] Hesychius, *s.v.* from Arist. *Opunt. Resp.*, and Plut. *Pyrrh.* 1.

Neoptolemos in Epirus before his return to Phthia and his death at Delphi.[1] Allen explains this by the hypothesis [2] that the Peleus dynasty retired into Epirus; this involves a legend-reversal of a suspicious type in the face of the early evidence, is in itself improbable in view of all evidence for the route of invasions after the Trojan War, and takes no account of his death at Delphi. How did Neoptolemos in legend reach Epirus from Troy? The earliest tradition is contained in the Cyclic Epic saga, namely, that he went on foot (πεζῇ) via Maroneia to Molossia (*i.e.* using the Grevená pass) before entering Thessaly, and Pindar (*Paean* vi) possibly uses this account; whereas in bringing him (*Nemean* vii) by sea to Scyrus and round to Ephyra, the Homeric capital of Thesprotia, Pindar is clearly using a later and rationalised account. Thus we find Neoptolemos using the 'Dorian' route through 'Dorian' territory; he recurs again in the West, settling a dispute for Odysseus (Plut. *Greek Questions* 14). After a short stay (even Pindar has ὀλίγον χρόνον) he returns home to Phthia and is killed at Delphi. His connection with 'Dorians' is paralleled by the position of Achilles; cults of obvious antiquity are noted in Thessaly, at Tanagra, at Prasiae in Laconia, and in Elis;[3] the distribution is Dorian, and we turn to Sparta for a clue to their introduction. Pausanias, Hesychius and Stephanus Byzantinus inform us that 'Prax, coming from Epirus,' brought the cult, which reminds us once more that Achilles was worshipped as Aspetus in that country.[4]

The validity of the evidence so far quoted for locating the Dorian home in Epirus rests on the fact that no motive can be adduced for a *Sagenbildung*, whose result is to enhance the past of a country often considered by the Greeks to be non-Greek. The next two points for discussion, namely Odysseus in the west and the Boeotian–Epirote contacts, are less reliable. We have mentioned the Cyclic Epic interest in Thesprotia, and mythographoi doubtless added their share; we may, however, note the mention

[1] Proclus, *Chrestomathia*, cf. Apollodorus, *Epit.* vi, 12 from the Nostoi of Hagias dated to eighth century; evidence neglected by Wilamowitz *Pindaros* p. 167 on Pindar, *Nemean* iv, 84 and *Nemean* vii, 38 (with which cf. *Paean* vi, 110); noted, however, by Cross, *Epirus* p. 100 n., though he pays no regard to the route bringing Neoptolemos to Epirus. Klotzsch, *Epir. Gesch.* p. 33 omits both the Cyclic Epics and the Pindaric evidence.

[2] Allen, *Homeric Catalogue*, p. 113, adducing no evidence.

[3] Plut. *G.Q.* 37 for Tanagra; Anaxagoras in Schol. Ap. Rhod. iv, 814 for Laconia; Paus. with Steph. Byz. *s.v.* πράκιαι iii, 24, 5 for Prasiae, and Hesych. *s.v.* Πρακνόν. For Elis, Paus. vi, 23, 3. The associations of all these cults suggest great antiquity. Cf. esp. Wide, *Lak. Kulte* pp. 233 f. (with other evidence for Achilles' name in Laconia); he omits discussion of the Epirote connection.

[4] The Acheron geography has not been quoted, because the rival claims of the other cults of the dead would demand discussion; there are, however, good grounds for supposing that Hades-cults spread from Epirote Acheron with the Dorians. Thesprotian Acheron and its oracle of the dead first appears in Hdt. v, 92 in the time of Periander, tyrant of Corinth. This suggestion gains greater probability if my point *re* Achilles cults is conceded.

of Odysseus helping the Thesprotian house against invaders called Brygoi,[1] of whose name a variant form (Bryges) is found in Macedonia, just north of the Haliakmon at Grevená (located by Grundy).[2] From Aristotle[3] we learn that Odysseus' journey to appease Poseidon, in search of the people 'who know not the oar and use no salt' brought him to Trampyae (by Métzovo); another tradition brought Thoas and the Greeks home from Troy by the Pindus route, where they led a nomad life, drinking the waters of Lakmonian Aeas.[4] Here again we have evidence for disturbance in the west and a suggestion that the Pindus passes were in use. The Odysseus-cults at Trampyae, like those in Aetolia and at Sparta, are undoubtedly adoptions, for Odysseus' family is never associated with the north-west mainland; the distribution is again Dorian, the Aetolian cult is mantic and the route of dispersion is certainly the north-west coast.[5]

The Boeotians are difficult to handle briefly; but we may postulate as a hypothesis—to solve the discrepancy of Homer's catalogue and Thucydides' account (explaining why the Aegeidae of Thebes were Dorian)—that the Boeoti tribe was split at the time of the Trojan war, with divisions both in historical Boeotia and in the region (unspecified by Thucydides but presumably near S.W. Thessaly) outside the Achaean realm, from which they came to Arne[6]; this hypothesis combines Thucydides with Homer's account, and the situation might be compared to the interpenetration suggested in the case of the Hellenes in the Spercheius valley; this twofold division is expressly stated by Thucydides in his parenthesis. Or (2), that Thucydides or Homer being incorrect (the former on the ground that Homer would have mentioned the northern Boeotians, the latter on the interpolation argument[7]), the Boeotians in the former case either were a Dorian pocket in the Achaean world before the Trojan War, or they received their Dorian element only when the Dorians came, after the

[1] Cf. Powell and Barber, *op. cit.* III, p. 43; Herodotus vii, 185, 2; also an Illyrian tribe at the sources of the Erigon, near the Deuriopes (*i.e.* by Monastir), Strabo vii, 7, 8.

[2] Proclus, *Teleg.* fr. 1 and Apollodorus, *Epitome* 34 (the second version given by the latter is less reliable than the first, confirmed by Proclus); also *Nostoi* frag. and *F.H.G.* III, 339. For Musaeus' Thesprotis cf. Clement Alex. *Strom.* vi, 2, 25.

[3] Ap. Tzetzes *ad Lycophron.* l. 800, using Arist. *Ithac. Resp.* It is an expansion of the prophecy of Teiresias in the Nekuia, *Od.* xi, 120 f.; cf. Wilamowitz, *Homer. Untersuch.* pp. 185–198, who concludes that this is part of the oldest Odysseus legends and that the ancients were correct in locating his journey in Epirus. E. Meyer in *Hermes* xxx, pp. 241–288, arrives at the same conclusions.

[4] Tzetzes, *ibid.* l. 1017. Aeas is the correct form of Aous in early authors, cf. Hecat. frag. 102 (ed. Jacoby) and Scylax, *Periplus* ch. 26. For the route we need hardly recall the obvious parallel of the return of Neoptolemos and the coming of Pythian Apollo.

[5] Arist. *loc. cit.*; for Sparta cf. Plut. *Greek Questions* 48 and Halliday *ad loc.*

[6] The view that the Boeotians were in S.W. Thessaly at the time of the Catalogue but were not mentioned therein seems untenable in view of the prominence of the Southern Boeotians. For Dorians in the Homeric world cf. E. Crete, Rhodes, and Cos.

[7] The weakness of this hypothesis is shown by Allen, *Hom. Catal.* pp. 45 f.

Trojan War; if the Homeric passage is interpolated the position presents no difficulty, but the theory of interpolation is itself difficult to hold. On these hypotheses (and I see no alternative) Boeotia was certainly connected, either wholly or in part, with North-west Greece. There is other evidence of such derivation. We have quoted Boion, the mountain name of part of northern Pindus,[1] and we may add the ethnic in -otoi paralleled by Thesprotoi,[2] the connection of Dodona and Thebes in Hesiod and Pindar, the route of Apollo to Tanagra, the dispersion of Achilles cults, and the concentration of mantic cults in Boeotia. There are further two explanations given of a custom traditional in Boeotia from early times; the tripods which were wrapped in garments and sent annually to Dodona were explained by Proclus[3] in conjunction with the τριποδηφορικὸν μέλος; he informs us that some Pelasgians sacked Panactum and the Thebans when inquiring at Dodona committed sacrilege, in atonement for which they sent annually a tripod, singing the tripod song on the way; Ephorus in Strabo[4] recounts the same story with the variation that the Boeotians and the Pelasgians applied to the oracle under pressure of Thracian invasion. The explanations are late, but the custom and the tripod refrain, as also the trial by three women and three men, are signs of the antiquity of the festival.

We have now finished our inspection of the spear-head tribes, showing so far as is possible their origin, their distribution and the significance of their ancient rituals. As was pointed out earlier, the peculiar merit of this evidence lies in the lack of suspicion with regard to later motivisation. We are thus in a position to assert that the Aenianes, Dolopes and Dryopes, must at some period in history have come from the north-west through the Tymphrestos region, to which they gave their names and from which traced their dispersion; as Homer has fixed the position of two of these tribes in Achaean times, one by Dodona and the other by the eastern end of the Tymphrestos pass, it is certain that they came on the wave of Dorian invasion; further, their association with the vanguard of the eastern wing of invasion is proved by the area of their subsequent distribution. The evidence then in the case of the Dryopes, Dolopes and Aenianes is strong,

[1] Strabo vii, frag. 6, Boion is the general name of Pindus from Orestis to Corax and Parnassus. In vii, 7, 9 Mount Poion (the Hellenised form) is defined as lying near to Macedonia, Thessaly and the country of the Aithikes at the sources of Peneius, *i.e.* just N.E. of Lakmon. As a town, Boion is one of the tetrapolis in Doris, again associated with a Pindus. The only other name known to me is Boiai in Cape Malea (S.E. point of Laconia).

[2] If the ethnic -atos is philologically related, one can adduce from Epirote inscriptions Klathiatos, Phoinatos, Kartatos, and possibly Horiatos (Fick, *Coll.* 1339, 1351, 1356, 1367, 1346, 1366).

[3] Proclus, *Chrestomathia*, Phot. Bibl. cod. 239, p. 990.

[4] Strabo ix, 2, 4.

and in that of the Boeotians *per se* barely conclusive; the Thessaloi have been neglected, save *en passant* (*e.g.* Pind. *Pyth.* x, 1, *supra*), but we shall come to them now with regard to the dialect evidence. For the invasion via West Greece, where the Cephallenes moving from N. Acarnania to the islands are the only spear-head tribe known, we have seen evidence of movement, which also is confirmed by the dialect evidence.

So strong is the evidence provided by the distribution of Greek dialects [1] in post-invasion times, that Buck wrote in 1926 that 'even if there were no tradition of a Dorian invasion, such a movement would have to be assumed.' [2] Of Central and Northern Greece in the Achaean period, prior to the Dorian invasion, Thessaly was according to Herodotus (vii, 176) Aeolic, was the home of Aeolus and of the leading Achaean heroes, and contained many place-names common to Aeolic colonies in Asia Minor; further, the presence in the classical period of Aeolic in Boeotia, which Thucydides (vii, 57) says was Aeolic in the colonisation period, argues contiguity of Aeolic peoples at an earlier time, a contiguity only possible in pre-Dorian invasion times when Achaean Thessaly extended beyond the Spercheius river.[3] In classical times, however, these Aeolic areas were divided by a Doric enclave, which can only have come from the west, in fact, as Buck points out, from Epirus; moreover, in Thessaliotis, the south-west canton of Thessaly, to a greater degree than in Pelasgiotis, Doric is mixed with Aeolic, and the same is true of Boeotia to an even more marked degree. This must mean that Doric invaders are present in varying degrees of intensity; as Doric elsewhere was the intrusive and dominating dialect, it is clear that the spear-head of Doric peoples came through the Spercheius valley, spreading laterally into South-west Thessaly and Boeotia to impose its speech in part upon earlier Aeolic peoples; [4] moreover, intrusion of

[1] Evidence is mainly inscriptional, and only the safer deductions are here cited; for Aeniania–Malis and Acarnania–Epirus, owing to the later expansion of Aetolia, and the colonisation of Corinth in the case of the latter, the evidence of inscriptions, usually late, is unreliable. I must reserve the discussion of Epirote inscriptions for a later date.

[2] In *Cl. Ph.* xxi, p. 18. The following summary is taken from Buck, *Greek Dialects* (revised edition).

[3] Corinthia in pre-Dorian times was likewise Aeolic; cf. Thuc. iv, 42, 2.

[4] Unless Doric can be shown to be regressive in Thessaly from Pelasgiotis to Thessaliotis (in all known cases it proved intrusive), we must assume that the Dorians invaded not direct from Macedonia, nor, in their main stream, into Central Thessaly, but came into South Thessaly from the south-west; in fact pass 5 was used rather than pass 4. As we should have expected, the western Greek Thessaloi, coming from Thesprotia (Herodotus) and giving their name to Thessaliotis, where Arne is situated (Thucydides), spoke a Doric dialect. In the case of the Boiotoi, Thucydides' account of their origin gains support. The evidence of dialect in Boeotia coincides with literary tradition to shew that the Dorian conquest of Boeotia was only partial; the resistance of Boeotia may have saved Attica from the Dorians, as Demosthenes hoped in the case of the Macedonian invasion. Boeotia is turned by the route to Delphi, used by Philip, and that may account for the prominence of Delphi in Dorian tradition.

Doric peoples was limited to S.W. Thessaly. Thus we have valuable evidence not only for the fact of a Doric invasion but an illustration of the route of that invasion, which confirms the evidence of Thucydides and Herodotus, our starting-point in the inquiry into the Dorian invasion and its route.

There is similarly evidence, though less cogent, for the western wing of invasion; South Aetolia was once Aeolic according to Thucydides (iii, 102), while in later times it was Doric, and the Doric of Elis contains an Aeolic admixture, most reasonably ascribed to the passage of the Eleians through Aeolic Aetolia during the Dorian invasion. Finally, the 'Doric' dialect, like the 'Dorian' peoples, splits into two parts, North-west Greek covering Elis and Aetolia, and Doric proper Laconia, Argolis, Corinthia, and Megaris. Further north we cannot trace the division with clarity owing to lack of inscriptional evidence prior to Corinthian colonisation and Aetolian expansion, but enough is known to corroborate the division of the 'Dorians' into two sects, the Hylleis or Dorians proper, who used the East-Greek route of invasion recorded by Herodotus, and the Dymanes or West-Greek Dorians, whose original habitat was especially, as we have endeavoured to show, Epirus.

Thus the combined evidence of ethnics, spear-head tribes' distribution, folk-memory in rituals, and dialect-distribution confirms the accounts in Herodotus, Thucydides and Pindar of the route followed by the Dorian πολυπλάνητον ἔθνος. The traditional account is, in fact, placed beyond the reach of reasonable doubt in the departments so far considered; we must now turn to the archaeological evidence for the Dorian invasion.

E. Archaeological Evidence in support of the North-west Theory.

Owing to the limited archaeological knowledge of Acarnania and Epirus, and the difference of opinion among archaeologists as to the precise characteristics of 'Dorian' culture, this section is of relatively small value for the purpose of our inquiry, and will be cursorily treated. The fact of such an invasion is again beyond doubt; burnt layers are found, Mycenaean sites deserted and new sites founded. In 1921 Mr. Casson [1] made an interesting if premature attempt to trace the Dorian invasion to its source by archaeological evidence; he prefaced his inquiry by a hypothesis which I consider incorrect, namely, that 'every object in the strata of a site dated to neither the Mycenaean nor the Sub-Mycenaean period, is peculiar to the culture of the "Dorian" invaders; whereas to infer from literary evidence the Dorian distribution and source and to assume certain objects to be "Dorian" and equate the two would be a *petitio principii* in its worst

[1] *A.J.* i, p. 201. The wording is partly my own; I must apologise for quoting a statement which Casson has presumably discarded.

form.' The site chosen by him is Sparta; now on his own showing the Dorian invasion lasted a century at least and the Dorians of Sparta (my Dorians *par excellence*) were at an earlier period situated in Phthiotis, Histiaeotis and Macedonia (he accepts the Herodotean evidence without appreciating its temporal significance); finally, as he himself says, settlement in Laconia must have taken some time before synoecismus was complete.[1] It is evident that the Spartan Dorians, who had shared in Thessalian culture and spent at least a century in an area presumably Mycenaean *en route*, are far from being the vessels of undiluted 'Dorian' culture.[2] I propose rather to follow the method considered by Casson a *petitio principii*—namely, to assume certain objects, on grounds of predominance at Dorian sites, as Dorian, and to see whether they occur in the regions which we have proved above to have been the Dorian home at a pre-invasion period.

The definition of Dorian culture is, however, complex. Mycenaean culture degenerates slowly before and after the period of invasions; Geometric elements reach far back and develop slowly; there is, in fact, no hard-and-fast line of demarcation. All we can hope to achieve is a definition of those objects demonstrably introduced by the invaders and unknown to Mycenaean culture; as the Geometric pottery in its most artistic form is the product of a people specifically non-Dorian,[3] it is only safe to say that the Dorian culture contained elements which in part inspired the Dipylon style and its antecedents. Other more conservative objects are, however, obtainable, and other sites more favourable than Sparta have been excavated. The best site should be one near the source (on literary grounds) of Dorian dispersion; Doris[4] has yielded nothing, Thessaly[5] and the Spercheius valley[6] have produced evidence for periods prior and shortly subsequent to the traditional dates, and Elis is represented by Olympia, a shrine occupied by the Dorians of the western wing who had had less contact with Mycenaean civilisation. Bearing this point in mind, let us try to determine some Dorian predominants.

The pottery I am not competent to discuss in detail. There are, however, certain conclusions which seem to me legitimate; panel decora-

[1] *A.J.* i, p. 204; the occupation of the site dates from 950 B.C. onwards.

[2] Conversely, to identify Geometric pottery of 950 B.C. as the product of early Dorian culture is fallacious for the same reasons.

[3] Attica preserved its isolation; Casson's arguments *op. cit.* p. 214 are unconvincing. Did Dorian intercourse come from Aegina and Euboea? Dryopes are located in the south of the latter and colonised Carystos, while others were pushed south to Hermione and Asine. The wanderings of this spear-head tribe may represent a route of Dorian invasion.

[4] Cytinium has been excavated unscientifically without result; Mr. Skeat and I visited Doris for a brief period of surface exploration without success.

[5] Especially Marmáriane, *B.S.A.* xxxi, pp. 1 f.

[6] Lianokládi, of which the exact chronology is a matter of dispute, was certainly pre-invasion.

tion, zoographic decoration, a *horror vacui*, and a concentration of ornament on the shoulder and round the handles are broad characteristics of Geometric, as opposed to Mycenaean, art. We shall expect broadly these characteristics at the fountain-head. Of conservative objects we may take first the fibula.[1] The 'spectacle' fibula, in view of its more frequent appearance in proportion to other fibula-types at the Artemis Orthia sanctuary at Sparta, has been widely accepted as a type predominantly Dorian;[2] this relative frequency is traceable in Boeotia and Phocis, in Elis at Olympia, and in Cephallenia, where the earliest types in Greece proper are found (probably prior to the invasion); and they are found in lesser numbers in Thessaly and Macedonia.[3] A second predominant, on more slender evidence,[4] is provided by figurines of clay or bronze, representing most commonly ducks and horses.[5] Found in connection with spectacle fibulae at the shrine of Artemis Orthia, they are very common and of the earliest type at Olympia,[6] where the Geometric settlement was large, and are found sporadically in Greece as far north as Leucas and Dodona on the west and Macedonia on the east (*e.g.* at Páteli by Lake Ostrovo and at Berrhoea).[7] Another feature of the Dorian invasion was the introduction of iron in greater quantities than before.

The difficulty involved in applying the evidence of Dorian predominants to the north-west arises from the undated nature of the Dodona finds. They may have been brought from the south in protogeometric, post-invasion times, and in so remote a part of Greece styles probably had a longer life than elsewhere.[8] At Dodona only three examples of the spectacle fibula have, as far as I know, been found;[9] the form apparently was of Cretan origin, and travelled up the Adriatic, where it is widespread, to the Danube, returning thence transformed into the spectacle fibula proper; its route of return is unknown archaeologically, save that it appears at Glasinač in Bosnia and in Macedonia on the Vardar. The three examples at Dodona, then, show that while the route[10] used by the

[1] Cf. especially Blinkenberg in *Historisk-Filolog. Meddelelser* xiii (1926–1927).

[2] Myres, *op. cit.* p. 425.

[3] *E.g.* Chauchitsa in *B.S.A.* xxiii.

[4] Cf. Lamb, *Greek Bronzes*, p. 38; figurines are found *e.g.* at Athens.

[5] Myres *op. cit.* p. 447.

[6] Casson, *op. cit.* p. 207.

[7] *Ibid.* p. 205, map of distribution. On the west coast they have been found at Thermon and Agrinion, as well as Dodona and Leucas.

[8] *E.g.* Lamb, *op. cit.* p. 97 for Peloponnesian influence in regard to the archaic Dodonean bronzes. On the other side note that the Bronze Age culture in Epirus persists into archaic times as regards pottery.

[9] Athens, Nat. Mus. 223, 298, 326.

[10] One can suggest as a possibility that it returned by the route it used in reaching the north; the sea-route does not touch Dodona, while the overland Via Egnatia route passes well to the north. There is also a school for Cypriote origin, cf. Thompson *L.A.A.A.* v, pp. 10–12.

brooch-trade did not pass through Dodona, the spectacle fibula had penetrated thither. However, the spectacle type is not predominant at Dodona; for the fibulae found there are predominantly of one type, usually termed the Epirote. We must consider this Epirote type; as they form the most common type at Dodona and occur sporadically elsewhere, their north-west origin is indisputable; their distribution extends to Phocis and Thessaly, and Myres [1] dates them to the Achaean period, pointing out that they fit chronologically into the expansion date provided by the Dorian invasion.[2] Of the catch-plate variety, these fibulae are remarkable for the fine geometric ornamentation and use of buttons on the bow.

In regard to figurines Dodona is better represented: [3] there are three horses of an early type, and similar figurines are known farther north.[4]

We now come to the Epirote pottery, which we have described at the outset. It is unpainted, but the use of paint is a matter of technique, not a proof of lack of decorative ability. The principle of location of ornament round the shoulder and handles, the system of zones, the *horror vacui*, and the mammiform ornamentation are all pronounced in Epirote pottery of the Bronze Age; if the last when translated into paint produces the concentric circle, as Myres has suggested (p. 453), then we have in this 'backwoods culture' a close, if barbarous, affinity with the broad characteristics of Geometric pottery. Other motives of Geometric drawing are paralleled in the case of animals [5] by the figurine horses, and in that of hatching and zigzags by the Epirote type of fibula (which we have reason to suppose was a concomitant of the Dorian invasion) bearing such ornamentation to a marked degree and also the use of the button.[6] Finally, with regard to iron, we have noted its presence in Thesprotia and among the Taphians during Homeric times, when its use was still rare in Achaean Greece.

The objection, that the crudity of this Epirote pottery is unworthy of

[1] *Op. cit.* p. 414. Epirote type = Blinkenberg Class V. Childe, *Bronze Age*, p. 115 supports Myres.

[2] The further fibulae found by Evangelides at Dodona (published *loc. cit.*) are in Blinkenberg's classification of class II two, of class V two, of class VI one, and of class VII one fine example.

[3] Athens Nat. Mus. nos. 640, 645, 646.

[4] At Glasinač in Bosnia; cf. finds at Kumani by Skutari of zoomorphic figures on fibulae in Ugolini, *Albania Antica*, p. 53 and pl. xxxiv fig. 41. Mr. Lef Nosi of Elbasan on the Via Egnatia route in Albania showed me a Geometric horse, with legs and belly forming a semicircle, of the type found at Dodona.

[5] The origin of the duck in Geometric art, if not from the islands, where the duck-shaped vase is early, may perhaps be sought in the lake-lands of Western Macedonia, Thessaly, and Epirus; duck are common in the last region, and Leake comments on the good shooting available. With regard to the horse, objections have been raised on the ground that the Dorians fought as infantry; this argument is invalid, for the earlier use of the animal is that of the pack-horse, and cavalry is a later evolution dependent upon settlement in plains, where that arm can operate. Cf. previous note for horses in Epirus.

[6] Of later finds cf. Πρακτικά 1931, p. 87 figs. 4 and 5; cf. Blinkenberg, *loc. cit.*

the peoples later called Dorian in the general sense, is based upon unwillingness to believe that the Dorian invaders were largely unconnected with the later ebullience of Geometric art. The traditions of antiquity and the locality from which the Dorians come make this unwillingness unreasonable; the Dorians though containing the germs of Hellenism were and must have been barbaric in culture.

We have pointed out the connection between Epirus and Macedonia at the period of the Dorian invasion, and have stressed the validity of literary tradition which brought the Dorians proper to Macedonia, or rather S.W. Macedonia, in the period prior to the invasion. The system, which we have applied to Epirus should be tested for Western Macedonia in the period and in the locality stipulated by literary tradition. Fortunately this has been done for us by Heurtley's [1] excavations and deductions at Bouboústi and by Casson's remarks [2] on Páteli to the north (cf. fig. 7); the conclusions drawn from these sites have been summarised by Myres.[3] The evidence is good: figurines and spectacle brooches are predominants at Chauchítsa in the Vardar valley [4] and spectacle brooches are found at Páteli; the pottery at the former is Central Macedonian, from which in a more crude stage our Epirote pottery derives, and at the latter rough earthenware pots are noted by Casson,[5] similar to the Epirote type. More interesting is Bouboústi: inhabited from 1300 to 900 B.C., its culture belongs to the Macedonian family, but not directly, the probable intermediate station being Thessaly, for a highly individual style has been evolved which argues separation from the parent stock. As Heurtley points out, the conclusion is tempting that here we have a site occupied by the Dorians (my Dorians *par excellence*), who, we have every reason to believe, were in the course of their wanderings settled for some length of time in Thessaly. The pottery of Bouboústi is Geometric in style, but much more highly developed artistically than that of Epirus, a distinction which is in accord with our conclusions drawn from literary and other evidence. There are, however, no figurines or spectacle fibulae of the required Dorian type at Bouboústi;

[1] *B.S.A.* xxviii, pp. 158 ff.

[2] *A.J.* i, p. 209; finds were not published by the original excavators.

[3] *Op. cit.* pp. 456 ff., from which I draw the above account in conjunction with Heurtley's article.

[4] The Vardar valley has connections with the north not only through the Morava, but also through the western Via Egnatia route. It is, moreover, noteworthy that in the Homeric period the Taphian pirates show that there was Adriatic trade (whether they or others blocked Odysseus' trade by that route), for piracy implies trade; if these pirates were as strong a bar to the north Ionian sea as Homer suggests, the overland Via Egnatia route becomes more valuable.

[5] Unfortunately not described more closely; Heurtley maintains that they coincide chronologically with the latter period of the Bouboústi site, in which case we must qualify our statement by saying that they are objects of peoples left behind in the invasion period but known at an earlier period in Central Macedonia.

figurines, on the other hand, are a predominant of Central Macedonia and the spectacle fibula occurs as far south-west as Páteli and Grevená. This led Myres [1] to the conclusion that these two predominants were finally developed in a period of pause prior to the invasion, 'in the highland region, which overlooks both the Macedonian and the Thessalian lowlands, and is at present so ill-explored.' It seems to me more probable that they were developed in Central Macedonia and were carried by the Western Macedonians through Dodona into Greece during the invasion period. Iron-working begins at an early period in Macedonia.[2] Without broaching the problem of the source whence iron was introduced into Greece, it can be safely stated that the iron from the north, which appears in the tenth-century graves at Tiryns and Athens, came to Greece through Macedonia, if indeed it was not brought from there by the Dorians themselves a century earlier.[3]

The Macedonian evidence has a further contribution to make, in that it explains the impetus which precipitated the invasions; the Lausitz culture, which burst into Central Macedonia about the end of the twelfth century, only penetrated as far south as Marmáriane among the foothills of Ossa; this irruption explains the shock which, to judge from the route taken by the Lausitz peoples, caused a lateral push to the west into the highlands of Macedonia, such as would displace the peoples of the Haliakmon valley and force them into Epirus.[4]

Let us summarise the archaeological evidence. For the period of the Late Bronze Age, Macedonia and Epirus, to which area the literary evidence of the Homeric poems and of later writers assigns the pre-invasion habitat of the Dorian peoples, are shewn not only to have lain outside the circle of Mycenaean culture but also to have been related to one another; further, a pottery, more advanced than the crude Epirote domestic ware, but deriving ultimately from the same stock, appears about 1300 B.C. in S.W. Macedonia after a stay in Thessaly—in fact a pottery in the same locality and shewing the same Thessalian influence, which we should have expected from Herodotus' account of the Dorians proper. Secondly, we find in these two regions the presence of those predominants, which we have decided were characteristic of the Dorian invaders, namely spectacle

[1] *Op. cit.* p. 448.

[2] Childe, *Bronze Age*, p. 23, dates it to L.M. III *b*.

[3] Cf. Wade-Gery, in *C.A.H.* II, pp. 524–525. The strongest evidence for the view that the introduction of iron into the Aegean was due to the Dorians, is provided by the discovery of the earliest iron weapons in East Crete, the locality of Dorians in Homer. On the other side cf. Myres, *op. cit.* pp. 433 f.

[4] Two objects at Dodona, an axe-head and a straight-edged iron sword, show traces of northern or Lausitz influence: the latter is paralleled by those found at Hálos (Myres, *op. cit.* p. 433); the former is tanged and of the Hallstatt type, cf. Carapanos, *op. cit.* Pl. liv.

fibulae and figurines; in addition, we have shewn that the novel artistic principles inherent in Geometric pottery, which we consider are most reasonably ascribed to the Dorian invaders,[1] are paralleled in a primitive stage of development in S.W. Macedonian and Epirote potteries and figurines, and we have found the same artistic mentality expressed in the Epirote fibulae which coincide in date and in distribution (only for E. Central Greece) with the Dorian invasion. Finally, Macedonia provides us with the impetus sufficient to precipitate that invasion into a region which had already admitted West-Greek elements and was in the process of decline.

From the archaeological evidence two other points arise[2]: the Bouboústi folk of S.W. Macedonia possess a much more advanced pottery than their western kin of Epirus, a fact consistent with the strong division which the evidence of dialect distribution, tribal ethnics and literary tradition has postulated within the invasion peoples, called generically Dorian; the absence of an archaeological line of demarcation, indicative of the Dorian invasion, is explicable on the grounds, that the invasion period covers three generations, during which time the invading peoples were susceptible to Late Mycenaean culture, and that the Dorian peoples themselves were for the most part nomadic peoples using only domestic pottery and so primitive in cultural development that they had little to provide for the spade of the archaeologist.

F. Conclusions.

In our review we have proved, or endeavoured to prove, that the literary evidence for the Dorian invasion is valid and consistent. This evidence has been tested by the application of arguments geographical, cultural and archaeological, and has been, we think, confirmed. The following deductions are then legitimate: the Dorian invasion was bipartite, the Dorians *par excellence* following the traditional route and bringing a

[1] The alternative view, that Geometric pottery is a natural development from Late Mycenaean, does not, of course, invalidate our theory; if anything, the crudity of Epirote pottery lends that view some support. Personally, I find it difficult to believe that the Dorian peoples are completely dissociated from a pottery expressive of artistic principles which are for me alien to Late Mycenaean culture. It is perhaps profitable to compare the influence of Orientalising art upon early Sparta with the influence of Late Mycenaean upon the Dorians of the invasion and post-invasion period; the Spartans adopted wholeheartedly an art technically far superior to their own but later transformed it by the application of their own artistic canons.

[2] A further point lies outside the scope of this paper. The Dorians according to our theory were for many centuries adjacent to Mycenaean Greece; while this helps to explain their speaking a dialect of Greek akin to Ionic and Aeolic, it does not cast any positive light upon their earlier derivation. It does, however, push back their entry into north Greece beyond the Mycenaean period; they cannot, therefore, be connected with the northern invasions which may have reached Macedonia in this period: cf. Childe, *Bronze Age*, p. 246.

culture which was one of the factors contributory to the formation of Geometric pottery, and the western Greeks, Dymanes and Pamphyloi, following a route of invasion to Elis, separated for a long period from their kin but of a culture fundamentally similar if more primitive. The motive for the invasion was supplied by the Lausitz irruption, the peoples were nomadic and pastoral in their mode of life, backward in respect to culture, but Greek in the sense that they used a dialect of the Greek language, had for long been adjacent to regions of more advanced Greek civilisation, and had in them the seeds of originality,[1] which later made the Dorian strain in Hellenic culture so fecund.

In the course of our inquiry we have been driven back to pre-invasion times, and have reviewed the position of Epirus and Dodona in the Early Bronze Age; we have seen some reason for returning to the theory that the Lianokládi culture may after all be due to an early immigration of a West-Greek tribe who influenced local Mycenaean culture; and it has become clear that the decay of Mycenaean civilisation and of Achaean dominance may have admitted West-Greek elements, forerunners of the invasions, not only into Crete and the Aegean, but also into the mainland; for in the time of Laertes the naval communications of earlier times with S. Italy and Sicily had already been cut. Finally, the 'Return of the Herakleidae,' as the Dorians styled their invasion, was in fact a literal return.[2]

Suspicion concerning the historicity and traditional account of the Dorian invasion has hinged upon three points. First, that the literary evidence was unreliable; history, however, has provided examples of accurate folk-memory no less remarkable, even in the case of the Greeks themselves, if we can term Homeric saga Greek; nor is it justifiable to disregard the evidence of Herodotus and Thucydides, of whom the latter was especially critical in his summary of Greek prehistory. Secondly, that the north-west and Macedonia were archaeologically outside Greece proper and that Geometric art is explicable as the recrudescence of an earlier culture situated within Greece proper; but the fourth-century history of Macedonian expansion and of the culture which it brought and the contemporary expansion of Epirus prove that Macedonia and Epirus were essentially a part of Greece proper, with Greek affinities and cultural individuality—in fact we may see in the Macedonian conquest a parallel for the Dorian invasion and in the inauguration of the Hellenistic Age a parallel for that of the Hellenic Age. Thirdly, it is objected that the traditional route of invasion is improbable; here, however, a comparison of Vlach life, developed in a region dominated by strong geographical

[1] For Epirus cf. fibula class v and Lamb, *op. cit.* p. 97.

[2] The Herakles legends, for obvious reasons, have been omitted in the present inquiry.

controls, with the mode of life suggested by the Dorian traditions makes the route highly probable.

The weak points in our exposition are obvious. Space has only allowed the handling of evidence in favour of the north-west theory and we have only made suggestions concerning any evidence in opposition. The archaeological evidence is especially thin,[1] and nowhere more so than in Epirus. The justification for reconsidering the problem of the Dorian invasion lies in the confirmation of Greek tradition it affords and in the clarification of pre-invasion and invasion wanderings. It is clear that the Dorians in the general sense issued from Macedonia and Epirus, and in Epirus we may hope to find a clue to the culture which they brought to Greece: καὶ τάδε μὲν τοῖς ἀρχαιολογοῦσι μεθείσθω.

N. G. L. Hammond.

Appendix: the Credibility of the Literary Sources.

Credibility has been assumed throughout section C of this paper; the assumption rests primarily not upon the independent evidence of archaeology, dialect, ethnics, etc., but upon the belief that the balance is heavily weighted in favour of the soundness of the literary tradition *per se*. As our conclusions based upon other evidence appear to be sufficiently strong to stand independent of literary support, the question of credibility is not vital to the issue; but, when our conclusions are found to coincide with the literary account, we are bound to inquire whether the coincidence is a manifestation of chance or whether the arguments in favour of inherent credibility are sufficiently strong to convert coincidence into corroboration. Proof is impossible, much must rest upon grounds of probability, and subjective judgment is involved.

We have been concerned only with the earlier evidence, and that only in so far as it bears upon the origin of the Dorians; we shall, then, limit our inquiry to those sources, abandoning the almost worthless elaborations of fourth-century and later scholarship (cf. Wade-Gery in *C.A.H.* ii, p. 525 for evaluation of the sources).

A. Homer: 1. *Odyssey* xix, 177, Δωριέες τριχάϊκες in East Crete. 2. *Catalogue* 653 f. the Rhodians διὰ τρίχα κοσμηθέντες are commanded by Tlepolemus, a son of Heracles, who had been expelled for the murder of the brother of his mother, a lady of Ephyra, by the 'sons and grandsons of Heracles.' 3. *Ibid.* 676 f. the contingent of Casos, Carpathos, Nisyros and Cos is commanded by two Heraclids, sons of Thessalos. 4. Finally, the Boeotoi figure only in Boeotia beside the Minyans, and the Thessaloi do not occur at all. The first three are recognised as being of the Dorian or rather invasion stock (cf. *C.A.H.* ii, p. 528), confined to a contiguous geographical area; of these, two are new-comers of one or two generations' standing (the chiefs are the only Heracleidae in the *Iliad*) and the Cretan Dorians are also new-comers (they do not figure in the Cretan contingent) with a dialect of their own; also they share with the Rhodians a triple division, which may well refer to the Dorian tribal system. Finally, the name Thessalos, which is an ethnic form, represents a

[1] *E.g.* in the case of Bouboústi, where the dating of the site mainly rests upon one Mycenaean sherd. We must look to the works of Mr. Heurtley and Mr. Skeat shortly to be published to extend our knowledge in this direction.

derivation as in the case of the ethnic Δωριέες, from a people outside the Achaean realm. The Boeotoi are firmly established, and their presence in Boeotia is accepted even in the legends of a later invasion of Boeotoi. Allen's arguments (*Homeric Catalogue*, pp. 45 f.) against the interpolation of the Boeotians appear to me conclusive; interpolation of the Heracleidae has not, as far as I know, been suggested, for the uncoloured nature of the references and the insignificance of the localities concerned would make any such suggestion difficult. Historically, the presence of Dorians in the South Aegean is probable, since their coming coincides with the sea-invasions period after the sack of Cnossos (cf. Myres, *op. cit.* p. 310). The Homeric evidence is important not only for the origin and connections of the Dorians but also for the independent growth of post-invasion legends of the Dorian wanderings; we shall apply this evidence below.

B. The accounts of fifth-century writers have been given above in full: we shall only note here certain points common to the separate authors. 1. Invasion of the Thessaloi into S.W. Thessaly (Thuc. i, 12, to Arne, 60 years after the Trojan War; Hdt. vii, 176, cf. How and Wells on i, 149 for the meaning of Aeolis, to which the Thessaloi gave the name Thessaliotis). 2. Peoples connected with Boeotia located in pre-invasion Thessaly (Thuc. *loc. cit.* Boeotoi in S.W. Thessaly; Hdt. i, 56, Cadmeans in Histiaeotis). 3. Invasion of the Dorieis from somewhere north of the Isthmus (Thuc. i, 12, dating 80 years after the Trojan war; Hdt. i, 56; Pindar, *Pyth.* i, 65, in the time of Aegimius). 4. From the Pindus range (Hdt. *loc. cit.*; Pindar, *loc. cit.*; for Pindus = the range, cf. *supra* p. 152 n. 2). 5. Doris as a whole the metropolis of the Dorian peoples (Thuc. i, 107, of the Lacedaemonians; Hdt. *loc. cit.*). 6. Erineos in particular (Hdt. viii, 43, and perhaps, by inference, Thuc. i, 107). 7. Connection of the Heracleidae with the invasion peoples (Thuc. i, 12; Hdt. ix, 26; Pindar, *Pyth.* i, 63; x, 2, Spartans and Thessaloi). 8. Dorian attack on the Isthmus (Thuc. iv, 42; Hdt. ix, 26). 9. The name Aeolic used of invaded areas (Thuc. iii, 102, of Aetolia; iv, 42, Corinthia; Hdt. vii, 176, Thessaly).

The similarity between these accounts would be sufficient, if we had no earlier evidence, to shew that a common source (or sources) was being used by the three authors; further, the casual way in which reference is made (*e.g.* Pindar's allusion to a picturesque detail, Hdt. vii, 176, and Thuc. i, 107; iv, 42) proves that the tradition was well established and widely known. Thucydides, who takes tradition elsewhere with a pinch of salt (*e.g.* i, 9), accepts the account without hesitation; further, in placing a division of the Boeotoi in S.W. Thessaly whence they were driven out 60 years after the fall of Troy, and explaining by the ἀποδασμός theory the presence in Boeotia of earlier Boeotoi, Thucydides found himself advocating a view which forced him to give an explanation for the apparent discrepancy with Homer—in fact he saw good reason to make a statement independent of, if not contradictory to, Homer for a period as remote as two generations after the Trojan War. As Thucydides differentiates between his sources for the still earlier period before the Trojan War (i, 9 τὰ σαφέστατα), we may be sure that he had sifted his sources in the present case: moreover, in concluding his survey of early Greek history (i, 20) he states that he had made his own investigations, and criticises those who receive tradition ἀβασανίστως. It is therefore highly improbable that he used an account compiled by the Ionian mythographers, *e.g.* Hecataeus, for whom he had little respect. Another example for this early period is provided by the case of Melos (v, 112), where, although the passage is rhetorical, it is unlikely that Thucydides would introduce the claim and give it his authority unless he considered it justified.

In the case of Herodotus the traditional account is fuller; it is not only im-

probable in view of his general method that he tampered with details, but we can also check him in regard to Pindus, the Thessalian invasion and the exit from Doris by reference to Pindar, Thucydides and Tyrtaeus; even if we suppose that he may have tampered with other details, namely the attribution of the Macednian name and the stay in Histiaeotis, it is hard to adduce any motive. If it is suggested that he added the Macednian name in deference to the royal house of Macedonia, one must explain why he uses the peculiar form Μακεδνόν instead of Μακεδονικόν or Μακεδών,[1] fails to hint at the application of the term, and derives the house from Illyria after flight from Argos (viii, 137) without reference to the Macednian name or the Dorians. He also refers casually to the Macednian name (viii, 43) without mention of a northern habitat (cf. p. 152 n. 2). Nor is addition credible in the case of the term Dryopis, the land of a tribe which evidently had distinct traditions, for Thucydides (vii, 57, 4) recognises them as a race apart. The Dorian origin in Phthiotis, the home of the Greek Noah, and the stay round Ossa and Olympus were probably in the traditional account. To one detail, as I have hinted above, suspicion may attach, namely the presence of the Cadmeans in Thessaly driving the Dorians out of Histiaeotis: it looks as though Herodotus or some earlier mythographer had fitted the Cadmean flight to Illyria into the story, by antedating the Boeotian invasion into Thessaly recorded by Thucydides (who distinguishes Cadmeans and Boeotians) and by translating Boeotians into Cadmeans; however, as the Cadmeans are not essential to our point, we may omit them.

We may then antedate the traditional account to the period before the Ionian mythographers; the source of Thucydides for the earliest times was 'the most reliable Peloponnesian account transmitted by memory from earlier generations' (i, 9, οἱ τὰ σαφέστατα Πελοποννησίων μνήμῃ παρὰ τῶν πρότερον δεδεγμένοι), while Herodotus (vi, 52 f.) refers to general Greek lists for the Spartan royal genealogy (καταλεγομένους ὀρθῶς ὑπ' Ἑλλήνων) and a special Spartan account which contradicts the poets (ὁμολογέοντες οὐδενὶ ποιητῇ) in regard to the name of the king who brought them first to Sparta. Thus the sources are twofold, a traditional (oral ?) Peloponnesian account, general Greek genealogies and a special Spartan genealogy; the last being susceptible of comparison with certain poets in such a matter as the names of kings at the time of the Dorian invasion into the Peloponnese. How far can we trace these poets?

In the fragments of Tyrtaeus (*fl. circ.* 640–623 B.C.) we find the Spartans exhorted as being of the race of Heracles (frag. 11, 1 Ἡρακλῆος γένος ἔστε) and the city of Lacedaemon claimed to be a gift from Zeus to the Heracleidae, with whom the Spartans entered the Peloponnese coming from wind-swept Erineos (frag. 2: Ζεὺς Ἡρακλείδαις τήνδε δέδωκε πόλιν· οἷσιν ἅμα προλιπόντες Ἐρινεὸν ἠνεμόεντα εὐρεῖαν Πέλοπος νῆσον ἀφικόμεθα); the mention of Erineos by itself in Tyrtaeus argues (as in the case of Pindar) the existence of a well-known legend at Sparta in the latter half of the seventh century. That this tradition was accurately preserved by fifth-century writers we may infer, as far as we can apply the test, by reference to Thucydides' phrase Δωριῆς ξὺν Ἡρακλείδαις (i, 12), and to Herodotus' (viii, 43) and Thucydides' (i, 107, cf. above, p. 173) mention of Erineos. We must assume that Thucydides and Herodotus were either using Tyrtaeus or his source, probably the latter in view of their general method. His source we shall discuss later.

We have now reached the period to which many scholars ascribe the fabrication of the Dorian invasion legends. One school gives the credit to Pheidon of Argos (early seventh century, cf. *C.A.H.* iii, pp. 761 f.) who is said to have used his political

[1] If Μακεδνός is held to be an early synonym, note that Hesiod, *Eoiae* fr. 3, uses Μακηδών.

power to persuade his allies to adopt Heracles as an ancestor and thus rest his empire upon the sanction of myth. Now Pheidon would only do this if he thought local genealogies carried weight in each locality; if they did carry weight, then it is extremely improbable that the autonomous Greek state would either sacrifice its own traditions to a foreign state or retain the imposed genealogy later; moreover, this hypothesis leads to the *reductio ad absurdum* (in *R.E. s.v.* Heracleidae) that Pheidon's oppressive power included Sparta, Thessaly, Macedonia, Thesprotia in Epirus, Doris, Corinth, Rhodes and Cos; with this empire may be compared the account in *C.A.H.* iii, pp. 359 f., which shews also that Sparta's hostility to Argos was only temporarily checked, and that northern Greece lay outside Pheidon's control. Cf. *C.A.H.* iii, pp. 527 f. on the subject.

Secondly, Beloch's ingenious theory (*G.G.* 1, 2 p. 76) that the Dorian invasion legends 'sehr jung sind und keineswegs auf wirkliche Volkstradition zurückgehen, sondern auf halbgelehrte Kombinationen'; he dates the fabrication of the legends to the end of the seventh century and their canonisation to the late sixth and early fifth centuries. The hypothesis underlying this theory is twofold: firstly 'ohne die Herakleiden keine dorische Wanderung,' and secondly the motive of invention was a desire to prove autochthony, and the pretext the name Doris in central Greece; further, the legends are based upon appeal to the Homeric Epos.

Beloch's learning, however, leads him to attach as much importance to Ephorus or even Ovid as to early evidence, so that he may demonstrate in the full-grown legend the fallacies of its growth; no one would deny the activity of fourth-century historians, but their elaborations do not discredit the early tradition, which we have traced to the time of Tyrtaeus from the accounts of Thucydides and Herodotus. The hypothesis itself is unsound: in the early tradition the Heracleidae, presumably a noble house, only accompany the Dorian tribe in entering the Peloponnese (Thuc. i, 12 ξὺν Ἡρακλείδαις; Hdt. i, 56 without mention of Heracleidae; Tyrtaeus fr. 2 οἶσιν ἅμα carries weight against Beloch stressing fr. 11, because the Heracleidae are specifically mentioned in the former fragment); therefore if one proves the Heracleidae legend a fiction, that does not disprove the legend or the fact of a Dorian invasion. Secondly, the Dorian peoples are by Beloch's hypothesis autochthonous; this forces him to assume (as the Dorians figure not at all in Homer's Greece Proper) that the Homeric Epos is not historical, a theory now quite untenable. The Dorians, however, deceived by the Homeric Epos into believing they were not in the Peloponnese in Homer's time and using the Homeric Epos to prove their autochthony, arrive at the astonishing conclusion that they had come with the returning Heracleidae from Mt. Pindus and Doris, the former certainly not a centre of Hellenism in the sixth century; the further addition of Epirus as the former home of the Thessaloi is no less significant, for Epirus was practically unknown till the fourth century, is first given a name by Pindar and Xenophon, and was for long considered barbarian and non-Greek (*e.g.* by Hecataeus fr. 119 ed. Jacoby *F.H.G.* I and Thucydides). Nor, as we shall see, can the legend of the Dorian wandering be explained by reference to the Homeric sources.

We may now return to our legend, which we have seen reason to suppose existed in a well-known form at Sparta in the latter half of the seventh century. Can we trace the genesis of this saga? Beloch's suggestion forms a good *point d'appui*; he explains that the legends were composed and current for a century before canonisation by subsequent mythographers. It is an obvious truth that a literary form crystallises oral tradition (*e.g.* Hdt. vi, 52), but this does not mean that the earlier medium of tradition was faulty; as the Homeric poems shew, recitation

and memory are not only conservative but also free from the tendencies of learning. Moreover, genealogies and folk-memories are treated with respect not only in an heroic age but also in a post-heroic age, and oral family tradition is jealous of literary canonisation (*e.g.* the Spartan genealogy preserved at Sparta in Herodotus' time alongside of poetic tradition); one notices the interest of Homer and his accuracy in tracing genealogies and dating thereby movements of peoples such as the Pheres (cf. *C.A.H.* ii, p. 526); and one remembers that the legend of Minos reveals memory of an historic fact dating at least 400 years before Homer's time. Interpolation therefore is difficult and accurate memory possible.

The literary crystallisation of the post-Homeric period is wrongly put by Beloch in the late sixth century; we have seen that this had already taken place in the seventh-century Tyrtaeus, who himself does not mark the beginning of post-heroic poetry.

It is easy to forget that the period between the rise of lyric poetry and the post-Homeric rhapsodes was not barren of literature on the Greek mainland; it was in this period that the poets of the Hesiodic school flourished. They dealt largely with genealogies in a period when these were of popular interest, and their works, mostly lost for us, formed the repository from which the lyric and later poets drew their mythological material.[1] The *Theogony* and *Catalogues of Women and Eoiae* date the beginning of this movement to the end of eighth century at latest; extant fragments from these works deal with connections of gods and men, deducing the beginnings from Homeric epos or filling up the gap by using eponyms, such as, in the case of the Dorians, Dorus and Xuthus the sons of Hellen; in dealing with genealogies nearer their own time they doubtless used genealogies of men alone, which allowed less freedom. The *Aegimius*, a fragmentary work ascribed to the Hesiodic school, is considered by Valckenaer to have contained the history of the Dorian Aegimius and his sons; the evidence, however, is most slender.

We may then suppose that the Spartan genealogies, and with them the traditions of Dorian origin received some literary form at the end of the eighth or early seventh century, deduced from oral tradition and transmitted orally as well as in the crystallised literary form (cf. Hdt. vi, 52). We must now examine the gap between this time and the middle of the tenth century, when the Dorians are known archaeologically to have settled at Sparta, and try to determine whether the traditions were the crystallisation of folk-memory and genealogies or inventions deduced from the current Homeric sagas.

The scale of the Dorian invasions in relation to Greek life and Greek history, as other evidence (*e.g.* dialect) shews, marks it down as a major event not only for the Greek historian of the twentieth century, but even more so in the experience of the Greeks of immediately succeeding generations; it brought to an end the Heroic-Mycenaean age on the mainland and sent the early colonists overseas; one would expect that the late Mycenaean peoples, who fled to Ionia and preserved for at least a century their own native epos before it became crystallised in the Homeric and Cyclic epics, would recollect the localities in which the first rude shock of invasion was sustained. Similarly, in the case of the invasion peoples it is natural to suppose that the Dorians, whose early antagonism to the pre-invasion peoples was preserved in the conscious differentiation between Dorian and Ionian (cf. the English attitude to the Welsh and the Macedonian to the Greek, and *vice versa*),

[1] Cf. W. R. Halliday, *Indo-European Folk Tales and Greek Legends*, p. 65, for the 'respectable antiquity' of Hesiodic versions; and p. 78: the Hesiodic writings represent 'the unification of historical traditions of the Greek tribes.'

would preserve records of their own past, certainly until they were adopted into the Hellenic family and probably until they lost consciousness of their own individuality.

Not only were the invasion peoples demonstrably conscious of race-distinction, but their culture and position were favourable to the preservation of folk-memory. For in the first period of conquest the invaders appear from the institution of Penestae in Thessaly, Helots in Laconia, and similar serf populations in Argos, Boeotia (probably), and Crete, to have formed a feudal barony of the nature calculated to preserve family traditions and genealogies—a feudal system which persisted down to the dawn of Greek history and in most Dorian states even longer. That in the case of Sparta these genealogies were carefully recorded and reached back to the earliest times we know from the evidence of Herodotus (vi, 52), and the family-trees of the Normans provide a close parallel (*e.g.* the Jersey families claiming descent from Rollo, first Duke of Normandy). Moreover, even upon Beloch's hypothesis the existence of such genealogies has to be and is admitted, in order that the Heraclid legends may be later superimposed upon an extant foundation. Nor can it be maintained that the invasion peoples were too colourless or too primitive to realise and preserve from the first invasion period a conscious race-distinction; for it must not be forgotten that they brought with them not only certain religious cults (*e.g.* those of Zeus and Apollo), but also social and political institutions of their own (*e.g.* triple tribal system and position of women); with regard to their folk-lore, we have unfortunately insufficient evidence to decide whether the body of myth and crudity of outlook found in the Hesiodic but alien to the Homeric poems were in part a Dorian contribution as well as a survival of an earlier period in Boeotia. Finally, the relationship of the invasion peoples to the Greek family is sufficiently close to warrant the supposition that the Dorian genealogies were not much less reliable than the Homeric.

We may then assume that the other invasion peoples[1] preserved genealogies comparable to the Spartan from early times, with a strong probability that they were reliable for the period from the beginning of invasion times until the date of literary canonisation; after which date folk-memory still provided a check upon literary expansion and corruption. We have thus traced the ultimate source of the account in Thucydides of the invasions, which involves not only Dorians proper but also Boeotoi and Thessaloi; and there is a strong presumption that those sources are reliable. We must now turn to Herodotus' account; while we must suppose that his chronology and his reference to the Macednian name and Thessalian invasion rests in part upon genealogical statement, it is clear from the geographical detail of the Dorian tribal wanderings that folk-memory is a subsidiary factor; the legend is peculiar to one tribe, and that tribe was always associated with Sparta especially, in which state we have noted the existence of the legend in the late seventh century. How can its genuineness be vindicated?

By way of analogy for the return-legend of the Dorian tribe, we may adduce the accurate folk-memory of the Israelites, whose wanderings to Egypt and back again to Palestine are essentially sound. The Dorian legend, as inferred from Tyrtaeus and stated in Herodotus, has two strong characteristics in favour of its authenticity and accuracy; apart from the names of Deucalion and Dorus (due at latest to Hesiod), it shews no sign of elaboration and it is only concerned with main geographical features such as might be calculated to impress and remain in folk-memory—namely the great mountains Ossa, Olympus and Pindus. If the objection be advanced that the legend contains a gap between Pindus and Doris, namely

[1] Among the Thessaloi, for instance, the tribe of the Aleuadae, as Mr. Westlake has pointed out to me.

Epirus according to the conclusions of our paper, we may mention that Pindus represents the whole range from Lacmon to Parnassus and that Epirus was nameless down to 500 B.C. (*e.g.* Aeschylus' vague phrase Πίνδου τἀπέκεινα *Supplices*, 253); moreover, in many cases of true folk-memory a gap is a common phenomenon.[1] The other geographical feature in the legend is the presence of Doris, a presence and a name natural if it marked the last halting-place in the Dorian wanderings before contact with Mycenaean civilisation. Thus analogy and the nature of the legend itself are strongly in favour of its inherent credibility; and we know from Thucydides (i, 9) that the medium of folk-memory, namely oral transmission (μνήμῃ ἀπὸ τῶν πρότερον δεδεγμένοι), persisted in the Peloponnese until historic times. Such then are the positive grounds for believing that genealogies and folk-memory not only existed from invasion times but were also reliable.

Our case is strengthened by negative arguments, shewing that these legends cannot have been invented in post-invasion times. The only possible motive for the invention of a legend, whether in Dorian Sparta, where it is traceable in its earliest form, or in Dorian Argos according to Beloch's hypothesis, is a desire to prove autochthony; as we have already shewn, the actual form of the legend is distinctly disadvantageous to this invention-motive. The invention theory, however, involves another assumption, namely that the invention was based upon an appeal to the Homeric Epos (the only alternative basis being folk-memory); an inspection of Homer damns this hypothesis even more thoroughly. Dorians appear in East Crete graced with an epithet significant to any Dorian; the same tribal division is contained in the Catalogue with reference to Rhodes; Dorion in the South Peloponnese occurs, while Doris is not known; moreover, the historical Dorians were centred in the Peloponnese in two areas looking south-east, Laconia and the Argolid.[2] Thus if antiquarian lore or an exponent of Hellenic derivation basing his claim upon Homeric epos invented the legend of Dorian wanderings and Dorian origin, he would have brought the Dorians from South Crete, wherein he would have had for company at least one twentieth-century scholar; in fact his theory would have been as transparent to modern criticism as Herodotus' attempt to derive the Spartan kings from Egypt (vi, 56).

So much for the invention of the legend of Dorian tribal wanderings and origin. Beloch by his ingenious but fallacious equation of the Heracleidae legend with the Dorian legend has still one argument left with which to support his hypothesis: let us then inspect his assumption that the Heraclid, and therefore the Dorian, legend was built upon Homeric epos. Heracles in Homer is firmly fixed in Thebes, his wanderings include Troy and Cos, Argos, Messene, and Ephyra; Heracleidae are located in Rhodes and the group of islands round Cos. Surely, then, a Dorian legend having as its basis a Heraclid legend reconstructed from Homer and designed to demonstrate Dorian autochthony, would start from Boeotia; and of the localities offered by Homer would choose the Peloponnese or the islands rather than the remote Ephyra, to which name Corinth laid early claim; moreover, in actual fact the Heraclid legend as evolved by the time of Pindar had severed the Thesprotian connection of the Heracleidae by locating Tlepolemus' murder of Licymnius in Argos (*Olympian* vii, 29 f.). Comparison of these results with the actual Dorian legend as preserved in its earliest form proves once and for all that it was neither based upon a Heraclid legend reconstructed from Homer, nor was itself constructed upon the Homeric epos. The source of the Dorian legend must then be folk-

[1] Cf. Halliday, *op. cit.* pp. 59 ff. for general remarks on Greek legend.
[2] Cf. Thuc. iv, 53, 3 for position of Laconia.

memory and genealogies dating from the post-invasion period, if not from even earlier times, and we see no valid reason for dismissing their claims to credibility.

We may add a word about the connection of the Heracleidae with the Dorian legend; they appear not as synonymous with the Dorians but as invading Greece with them and presumably in the position of leaders; nor, one imagines, do they form a tribe, but, as their name indicates, a noble family claiming descent from Heracles. While it is obvious from Hesiod and later writers that the legends of the Heracleidae were much expanded in post-invasion times, particularly by Argos, we can go behind their account by observing from Homeric epos whether the connection with the Dorians is itself implicit. As we have seen, Heracles is firmly rooted in Thebes, for, however much we believe the Homeric legend to confuse Heracles the god and Heracles the man, his birthplace could hardly be forgotten; thus the family of Heracles had justice in their claim to autochthony, upon which the 'return' legend was based. The Heracleidae, however, despite Heracles' reputation do not appear within the Achaean mainland realm, as the place of his birth would lead one to expect; they must have been ejected from Thebes if, indeed, they ever existed there. They appear in two districts, however, which we have seen reason to associate with Dorians of Achaean times; the only Heracleidae known to Homer are Pheidippos and Antiphos sons of the Heraclid Thessalos and situate in the Cos group, and Tlepolemos son of Heracles (but overlapping two generations) in Rhodes. Now, Homer preserves a clue to the home whence they removed to the south Aegean. Thessalos is a non-Achaean name and is an ethnic form which suggests that he came from a region outside the Achaean realm—this conforms with, but can hardly be the basis of the unanimous later tradition that the Thessaloi came from S. Epirus. Secondly, Tlepolemus was expelled, for murdering the brother of his mother, by the 'sons and grandsons' of Heracles, who are presumably the Heracleidae. Where then were they? Homer says Tlepolemos' mother came from Ephyra, a city which from its prominence in the *Odyssey* is most probably the capital of Thesprotia; moreover, Homer gives no hint that the scene has changed from Ephyra, nor that Licymnius the uncle was the brother of a step-mother, both of which points the Argive account (Pindar, *Olympian* vii, 29 f.) must assume; moreover, the Argive account is suspect not only because early Argos claimed Heracles but also because the aetiological motive is contained in the name of an Argive hill, Licymnia. Thus it may be that the 'sons and grandsons of Heracles,' and Thessalos the Heraclid were native to S.W. Epirus, the region where we have located the presence of invasion peoples and the passage of the Dorians in the period shortly prior to the Dorian invasion; thus the Heraclid-Dorian connection (a detail not affecting closely the validity of the rest of the Dorian legend) may rest upon an historical fact. The evidence, however, is admittedly slight and we may only venture the suggestion as a crowning conjecture to cap much that has been conjectural.

N. G. L. H.

EXCAVATIONS AT HALIARTOS, 1931

(Plates 35–37).

The excavations which I undertook at Haliartos in 1926 were intended mainly as a test of the possibilities of the site. The principal result was the discovery on the summit of the Acropolis of a previously unknown sanctuary.[1] For various reasons it was not possible at that time thoroughly to explore the remains of the sanctuary, but in 1931 I received a grant from the Research Committee of the University of Birmingham to enable me to do this. The excavation was carried out in April 1931. The Greek Government was represented by Mr. Karouzos, Ephor of Antiquities for the district. In the work of supervision I was assisted by my wife. Mr. Richards of the Lake Copais Company's surveying staff kindly made the plan of the site. I have since [2] paid another visit to Boeotia to complete my study of the results.

The aims of the work done in 1931 were to determine the plan of the temple itself and find out whether any trace survived of its eastern end, which the 1926 excavation had failed to identify, and also to excavate the long rectangular building to the south of the temple, which from its style seemed to be a part of the sacred precinct. It was hoped too that in the course of these operations some discovery would be made which would reveal the name of the deity to whom this temple had belonged.

[1] Published *B.S.A.* xxvii, p. 81 and xxviii, p. 128.

[2] Easter 1933. My list of obligations in addition to those mentioned is a long one. My journeys to Greece both in 1931 and in 1933 were undertaken with the aid of grants from the University of Birmingham Research Committee. I am greatly indebted to Mr. G. L. Bailey, General Manager of the Lake Copais Company, for repeating his kindness shewn during the 1926 excavation and supplying me again with tools for the work and allowing my wife and myself to be accommodated in the Copais Compound; also to Mr. Daniel Steele of the Copais Company for his interest and assistance in many ways. My warm thanks are also due to Mr. Karouzos for the hospitality of his house while I was in Thebes.

It was my good fortune in 1933 to be working in Thebes Museum at the same time as Professor P. N. Ure, who placed his unrivalled knowledge of Boeotian pottery at my disposal. He has since increased my debt to him by reading and improving the section on pottery.

I have had the privilege of discussing my discoveries and conclusions with a number of scholars and have benefited by their knowledge and their views. I name Professor Beazley, Mr. Marcus Tod, Mr. Payne, Prof. Wace, Mr. Karouzos, and Mr. R. H. Jenkins.

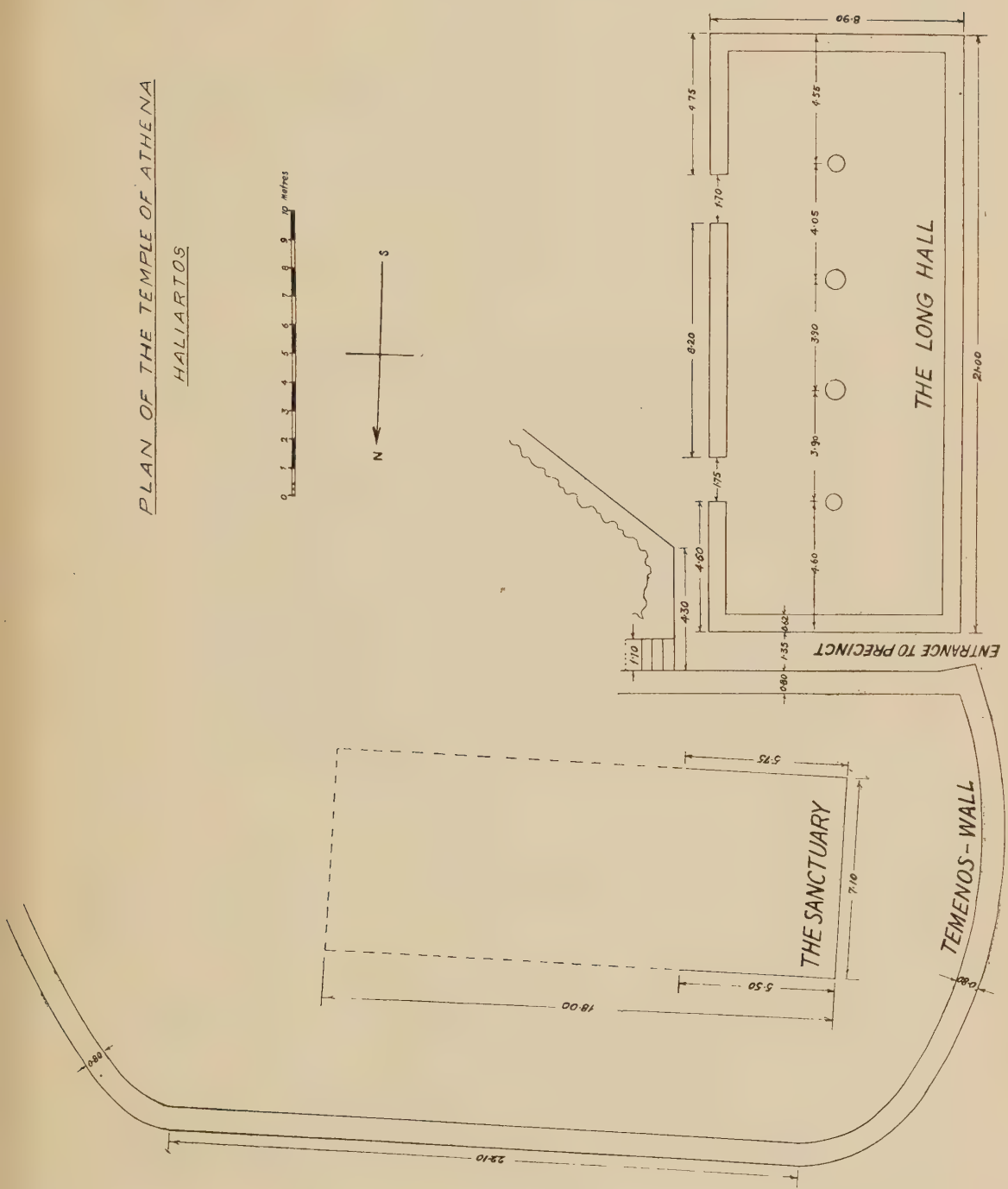

Fig. 1.—Plan of Site.

The Temple Proper.

The foundations discovered in 1926 consisted of a western end-wall four courses deep, and two side-walls which ran eastward about 6 m. and appeared to come to an abrupt end. The trenches made in 1926 east of these surviving foundations were now dug down to virgin soil and carried several metres further to the east, but without yielding any trace of a continuation of the foundations. Accordingly, a deep trial trench was dug eastward in the centre of the space believed to have been occupied by the temple. This produced no result until 18 m. from the west end. Here a number of fragments of poros were found: the whole area just at this point was opened up and was found to contain a mass of broken and decayed poros, including pieces of column drums and of squared blocks. The quantity was so great that it was impossible that it should have collected here by chance. A reference to the results of trials made in 1926 shewed that it was exactly at this point, namely 18 m. east of the west end, that the piece of poros column drum found in that excavation was dug up. The most likely explanation is that these remains are the ruins of the eastern façade of the temple, and that its length was originally eighteen metres. Additional evidence that the temple once extended in this direction was obtained later when a large block of hard limestone, conforming in every respect to the blocks constituting the existing foundations, was found about 14 m. from the west end, not *in situ*, but having slipped into an oblique position just outside the area supposed to have been covered by the temple. The almost complete disappearance of about two-thirds of this temple while the foundations of the remainder survived intact seemed to call for some explanation. An examination of various sources of evidence shewed that the solution is to be sought in changes of level which the land surface in this area has undergone in the course of centuries. It appears certain that the land around the eastern part of the temple was higher at the time of its construction than it is to-day, and that the temple was built on a slope with its western foundations stepped against the slope. Later, when the higher ground in the eastern area became denuded, the temple foundations, it may be presumed, were exposed and suffered removal or destruction.

Several lines of evidence converge to demonstrate this:—

1. When the dressing on the face of the south side-wall (fig. 2) is examined it will be seen that the line dividing dressed surface from undressed surface runs diagonally upward, rising towards the right. Thus in the photograph the top block in the angle itself is dressed all over its surface. In the next one the dividing line passes diagonally upward from left to right. The surface of the third block in the course, which does not appear in the photograph, is left undressed. These facts suggest very strongly

that the surrounding soil sloped upward to the east fairly steeply at this point.

2. Confirmation is found in the length of the various courses of this side-wall. There are four in all, but the lowest is discontinued 2 m. from the angle, the one above extends 2·50 m. from the angle, and only the upper two run on tc the final break at 6 m. Evidently, therefore, these foundations were stepped against a rising terrain. In the northern side-wall all four courses run out to the break, and it would seem that on that side the slope was not so steep.

3. Additional evidence comes from the flight of steps which led to the eastern end of the temple. There are now four steps and probably

Fig. 2.—South-West Angle of Temple Foundations, shewing Dressing of Blocks on South face.

at least one other above these is missing. Even so the level of the surviving top step is higher than the level of the dressed block on the south-western angle (see Pl. 35, 1), and therefore the steps led to ground which was higher than that surrounding this angle.

4. Excavation in the eastern temple area gave the impression that the strata corresponding to the period of occupation by the temple had largely disappeared. Very little was found to represent the period.

Foundations of an Earlier Temple.

Adjacent to the sanctuary foundations and running parallel to them on the north side there was discovered a wall several courses deep of soft limestone set in large blocks. This is most probably a surviving part of

the foundations of an earlier temple. Its position is shewn on the small plan fig. 3 and in Pl. 35, 6. At the eastern end the remains are firm and strong, forming a sort of platform 1·7 m. across and 0·7 m. lower than the level of the later temple. Westward they extend as far as the temenos wall, but have no structural link with it. At this end the lowest course alone survives and it is very much decayed and broken up. In fact there is sufficient of the same material mixed with the soil over almost the whole western area between the sanctuary and temenos wall to make it fairly certain that these foundations once occupied a considerable part of that area, but the stone is in such a decayed and crumbling condition that it was not practicable to investigate fully the plan of the building.

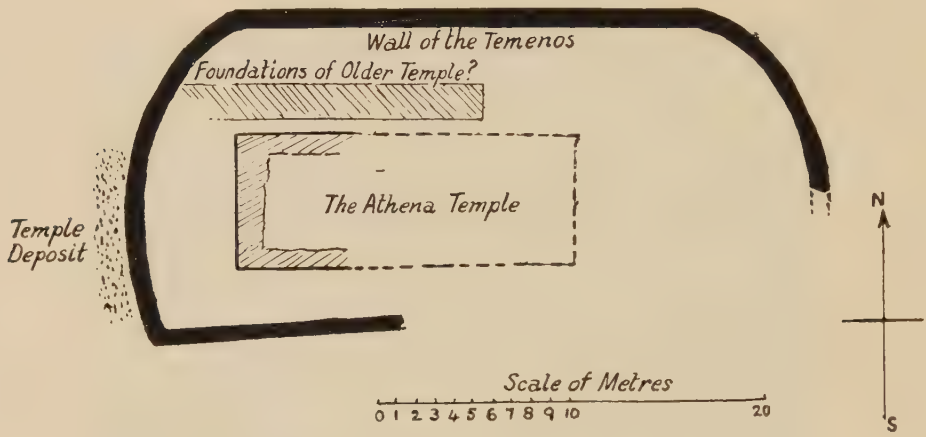

Fig. 3.—Small-scale Plan of Temenos.

Excavation of the soil above and around this structure produced the piece of a bronze tripod illustrated in Pl. 37, 5 (see below, p. 200), handle-sherds from two geometric bowls, and several fragments of Corinthian kotylai. On this evidence it is unlikely that these foundations were laid at a more recent date than the seventh century B.C., and it is quite possible they were earlier.

The Rectangular Building or Long Hall.

This building, lying to the south of the sanctuary, was discovered and its outline defined in 1926, but was not fully explored. The first task in excavating it was the removal of a mass of unworked loose stones which lay inside it. These came from the walls of post-Hellenic houses which formerly occupied this part of the site. When the stones had been removed the lower courses of the walls of these houses were found intact and it was not deemed advisable to remove them. The four walls of the

Hellenic building were duly excavated and were found to be in the dry-jointed polygonal style throughout, the surviving part consisting of an upright wall of double thickness, faced inside and out, set upon a horizontal footing course. In the east wall two openings were found, each about 1·75 m. wide, (*i.e.* 4 πήχεις) and each about 4·7 m. from the corner nearest to it (Pl. 35, 5). These were the doorways of the building. In the interior four circular stone bases were uncovered, about 0·4 m. in height, disposed at equal intervals along a line running up the middle of the building lengthwise (Pl. 35, 3 and 4, and see plan, fig. 1). The upper portion of these bases was carefully rounded and levelled but not polished: the lower portion, which would have been hidden in the ground, was left rough. The two inner bases are slightly larger, being 0·8 m., while the two outer ones are 0·7 m. in diameter. These were the bases of the pillars which supported the roof of the building: the pillars themselves were probably of wood. The disposal of these bases, and the absence of any remains of a cross-wall within the building suggest that it was a single long hall.

Another circular stone base was found outside the long hall at the south-east corner: it is smaller than those inside, only 0·55 m. in diameter, and there is no evidence to shew whether it is now in its original position.

The Paved Passage.

In 1926 there was detected but not excavated a narrow passage between the north wall of the long hall and the near portion of the temenos wall, running into the precinct as far as the steps. It was stated in the earlier publication (*B.S.A.* xxvii, p. 89) that there was a late intrusive filling of stone blocks lying in this passage. Examination shewed that this filling was in a decayed condition, and that it had soil below and on both sides of it. It was easily removed and the passage cleared (Pl 35, 1 and 2). It proved to have been paved throughout its length with thick flat limestone slabs of irregular shape well fitted together. The paving nearest the outer end is missing, but there was a foundation course for the paving at the entrance itself, and this survives. The paving does not end at the steps but continues round the corner towards the near doorway of the long hall without quite reaching it. The end of the paving is irregular and is probably not complete. (See Pl. 35, 5: the end of the paving is just visible on the ground level at the right of the picture.) The paved passage was thus the main entrance to the precinct from the west; it gave access to the sanctuary by way of the steps and led also to the long hall. The significance of this is discussed later (see p. 204).

The excavation of the passage resulted in the uncovering of two good pieces of wall-masonry which constitute its sides, namely temenos wall on one side and north wall of the long hall on the other. They are

in the dry-jointed polygonal style of building, in which blocks of irregular shape and size are carefully fitted together without regard to arrangement by courses.

The discovery of another wall of this type in circumstances which made it approximately datable is of value because there has been some dispute as to the period in which the style was used.[1] At first sight, in the case of the Haliartian walls, one thinks perhaps of the polygonal masonry found at Asine, which belongs to Hellenistic times. But the comparison is not valid because at Asine the style is not polygonal in the truest sense as defined above. As the published photographs [2] admirably shew, the Asine polygonal is closely related to a style with horizontal courses which occurs in contact with it and is indistinguishable from it in point of date: in fact the polygonal portion itself falls roughly into horizontal courses. A truer parallel for the Haliartian polygonal is the fine terrace wall at Delphi belonging to the late sixth century, in which horizontal courses cannot be detected.[3]

The Temple Deposit.

Throughout the site the part most prolific in small finds of various classes but especially in pottery was a limited area just outside the western arc of the temenos wall (see fig. 3). It was at this spot that the first trench was dug which led to the discovery of the temple in 1926, and both at that time and in the 1931 excavation it continued to produce far more in proportion to the soil removed than any other part of the site. In fact in 1931 this small area, about 9 m. in length and less than 2 m. across, produced more than one-third of the whole amount of pottery found on the site. Nor did it appear that chance was responsible for this result, for the pottery came up in a sequence which unmistakably indicated a steady process of deposit. It cannot be claimed that the stratification was complete and undisturbed, for it occasionally happened that an object from an early period was found with later ones and *vice versa*, but in the main the upper strata contained pottery and other finds which could be dated with certainty in the Hellenistic period, and as the trench was deepened, the finds which it produced gave continuous evidence of earlier dates, until finally at the bottom there was a clear indication that a sixth-century level had been reached.

Thus the evidence shewed that pottery, figurines, lamps and other objects had been purposely thrown away here, not once or twice but

[1] Robertson, *Greek and Roman Architecture*, p. 42.

[2] Frödin and Persson, *Bull. de la Soc. Roy. des Lettres de Lund*, 1924–5, fasc. 2, pls. VII, 1, XI, 1.

[3] *Fouilles de Delphes*, II, 1, figs. 115–120; other parallels, Robertson, *l.c.*

repeatedly over a long period of time. The area in question was at the back of the temple, exactly outside the precinct wall. It is reasonable to assume that the things found there were flung out from the temple and that this area was, in fact, a deposit for votives and unwanted objects. Among the immense quantity of pottery which it produced was found a number of sherds with incised inscriptions. They came up at all levels except the lowest. Most were small fragments containing from one to three letters (Pl. 37, 4), but two were of larger content. One was a piece of the rim of a black-glaze pot with the name Kallias incised on the outside of it, the lettering suggesting that its date was in the late sixth century (*v.* Inscriptions B 3(*a*) 1). The other, and by far the most important find from this deposit, was an almost complete dedicatory inscription incised on the outside of five joining fragments of the rim of a black kylix (fig. 4). The dedication runs:—

Μνασιγενεσ τἀθαναι ἀ[ν]εθεκε

Fig. 4.—Dedicatory Inscription to Athena.
(Scale 1 : 2.)

The sherds were found at a depth of just less than a metre below ground level; the breaks between the fragments are not new and the sherds came up separately in the course of a couple of hours' digging, but all from the same place. The black-glaze surface is in good condition and the inscription so far as it survives is in perfect preservation.[1]

Significance of the Athena Dedication.

The inference that may be drawn at once from the finding of this inscription in such a place is that the temple itself belonged to Athena. It is in the last degree improbable that a cup dedicated as this one was to Athena should be placed in the temple of some other deity. Nor except by some extraordinary freak of chance could it have found its way to the votive deposit of this temple if it had been dedicated in some other one. The assumption will be made, therefore, that the inscription gives the

[1] See also under Inscriptions B 1.

information which had so far been lacking throughout the excavation, namely that this temple on the summit of the Haliartian Acropolis was an Athena-temple.

This discovery is of more than ordinary significance. As mentioned in a previous article,[1] Pausanias, our only guide in antiquity to the sacred buildings of Haliartos, names no temple there as belonging to Athena. He mentions three sacred places which he was able to identify—the temple of the Praxidikai, the heroon of Kekrops, the μνῆμα of Lysander.[2] But he says also that at Haliartos in his time there were temples whose ownership he could not establish.[3] They had neither roof over them nor cult-statue within them, and from his account were evidently in a ruinous condition. Now from the evidence gathered in the 1926 excavation it had already seemed highly improbable that the sanctuary then found was any one of the three named by Pausanias. On the other hand, it seemed likely enough that it was one of the ruined temples which he saw but could not identify. The discovery that it was an Athena-temple makes this latter probability almost a certainty and represents, therefore, the recovery of a fact which had disappeared from general knowledge, and even from local knowledge, before the time of Pausanias.

Architectural Remains.

1. *Stone.* The 1926 excavation had shewn that the columns and mutules of the temple were of poros. The work done in 1931 does not add much. In the course of the search for the eastern end a small piece of an architrave block of poros painted red was found. The remains of the eastern end when identified did not yield any new information about the entablature.

2. *Terracotta.* The architectural terracottas found in the excavation of 1926 were of little value—a piece of a lateral sima and a piece of a raking cornice, both in very bad condition. The 1931 excavation was more fortunate, a fine painted terracotta antefix almost intact (Pl. 36) being dug up between the north doorway of the long hall and the section of the temenos wall opposite, about a foot below the surface. When it was found the front was covered with a thick chalky deposit, but after this had been removed the colours proved to be remarkably well preserved. The antefix is of a light yellow clay with black gritty particles in it. The nine-leaved palmette and the inverted lotus which make up the design are in low relief. The two colours are black and a red near to purple. The background is the light yellow of the clay. The design is composed on a symmetrical device consisting of a narrow black fesse inside a voided fesse of red, with a red roundel on either side. Above, a quarter-roundel

[1] *B.S.A.* xxviii, 140. [2] But see Historical Appendix, p. 209. [3] IX, 33. 1.

in red surmounted by a curving band of black forms the centre of the palmette. A similar charge below represents the ovary of the lotus. The colours are thus divided in the remainder of the design. Black; the middle stamen of the lotus, the petals of the lotus, the stems except the roundels within the volutes, four alternate leaves of the palmette, the outline of the antefix except the wings. The rest is red.

The antefix was moulded in one piece with the arched cover-tile behind it, and the tile survives for a length of 4 cm. It will be seen from the photograph of the back (fig. 5) that a tongue, V-shaped in horizontal section, descended from underneath the cover-tile just before the point

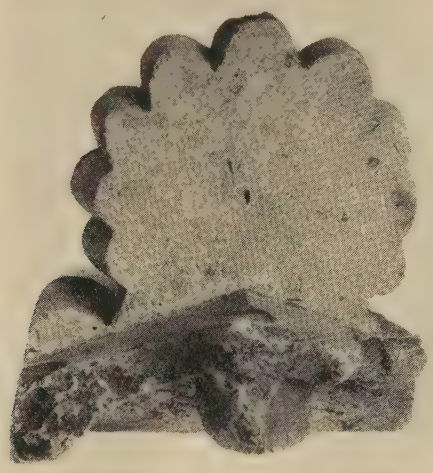

Fig. 5.—The Antefix: back view. (Scale 1 : 4.)

where the tile is broken off. This tongue must have fitted over two appropriately shaped ledges or mouldings which stood up between the tongue and the antefix, one on each of the two under-tiles which the cover-tile clamped together at this point. Thus the cover-tile and under-tiles were securely locked. The portion of the V-shaped tongue which is visible in the photograph was painted red.

For the design of the antefix no precise parallel can be cited, but there are several fairly close, notably *Olympia* II, p. 194 and pl. cxviii, 1; in this the red-black relation is reversed in all material places and there is no painted outline round the antefix; also the central device is a simple fesse between the roundels, and the two filling leaves seen beneath the volutes in the Haliartos antefix are not found in the one from Olympia. These are all differences of taste rather than of development. Comparison

may also be made with the type with seven-leaved palmette in *Corinth* IV, pt. 1, pl. II, which apart from the number of leaves is quite a good parallel, and with the antefixes from the Megarian Treasury at Olympia (pl. cxix, 5), which, however, differ significantly in that in them there is special emphasis on the central leaf of the palmette.

The date cannot be precisely fixed, but if we bear in mind these parallels it would seem that we shall not be far wrong in assigning the antefix to the third quarter of the sixth century.

The only other discovery in this class was a very small fragment of a raking cornice, with a portion of a palmette, the leaves alternately red and black on a cream ground. It was found inside the long hall.

Pottery.

Pre-Hellenic.

The pre-Hellenic pottery found in 1931 was scarcely more than a repetition of that of 1926. The Mycenaean area discovered then in the quarter which must now be referred to as the site of the east end of the sanctuary again produced characteristic results. A detailed account follows:—

1. Parts of two shallow unpainted bowls, one of red clay, one of buff clay, similar in shape and fabric to some examples from the House of Kadmos, now in Thebes Museum (Ἐφημ. 1909, p. 74, fig. 7, 4).

2. Part of stem and part of lip of a Mycenaean goblet of coarse red clay with no traces of paint; the stem, 3·5 cm. in diam., of a large Mycenaean goblet, decorated with broad bands painted on a light buff-coloured clay.

3. Two sherds from a grey Minyan goblet, and a sherd from another grey Minyan vase of uncertain shape.

Apart from this area very few prehistoric sherds were found. Some isolated grey Minyan fragments came from various parts of the site.

Hellenic.

The Geometric period is still poorly represented. In the course of the search for the east end of the temple there was found the upper half of a handle of a fine Geometric bowl, probably Attic (fig. 6 *g*).

The pottery of later styles is more plentiful, though there is not very much to represent the seventh century. The sherd illustrated in Pl. 37, 2, which came from the lowest level of the temple deposit, is rather puzzling as it does not fit in exactly with anything already known. The description is as follows: design in black on pale red clay ground; interior unpainted; average thickness of sherd 0·6 cm. The possibility cannot be excluded that it is a Geometric importation from one of the islands, but the clay looks Boeotian and on the whole it seems better to think of it as a local product. In that case it may be from an early Boeotian kylix somewhat

similar to one in Berlin, illustrated in *J.d.I.* 1888, p. 338, fig. 14, which has a zone of double chevrons, though the space between them is not reserved as in the Haliartos sherd.

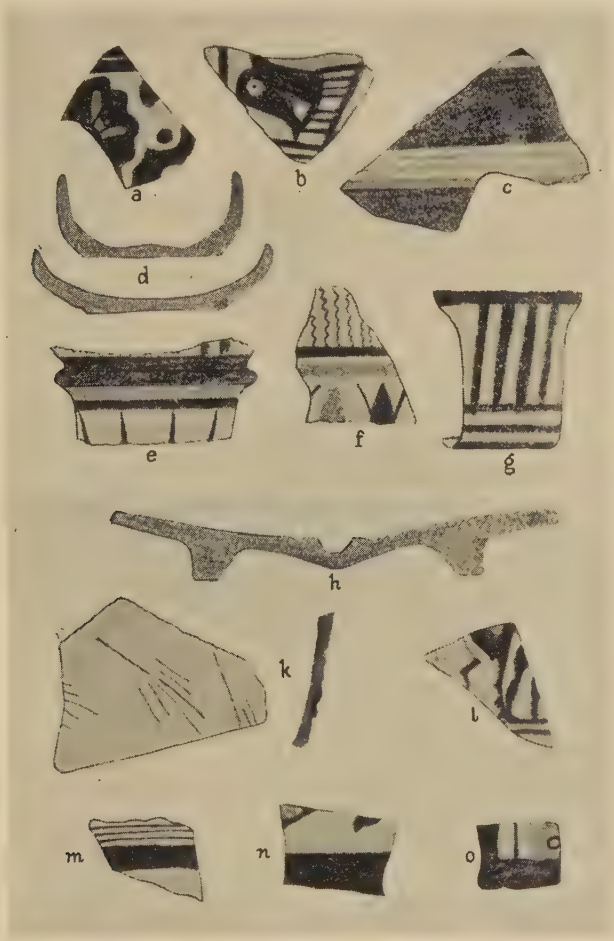

FIG. 6.—DRAWINGS OF POTTERY FROM VARIOUS PARTS OF THE SITE (see pp. 190 ff.). (Scale 1 : 2.)

a. Corinthian. *b*. Boeotian. *c*. Laconian. *d*. Black toy pots, in section (from the Long Hall). *e*. Fabric undetermined; decorated in black on light brown clay, with purple band below the torus (from the Temenos). *f*. Corinthian. *g*. Attic Geometric(?). *h*. Hellenistic. *k*. Fragment of black bowl with rough incised 'pitchfork' decoration inside, fluted outside. *l*, *m*, *n*. Black figure. *o*. Black figure, mended in antiquity.

The best among the Corinthian fragments is that shewn in Pl. 37, 1. It was found at a low level of the temple deposit and came from a large

vase, probably a kotyle, belonging to the earlier period of the style; there are several colours used for the bands below the animal zone; a broad black band, a white band, a broad purple band, a white band, a black band. The inside is varnished. Another small Corinthian fragment, from the temenos, is shewn in fig. 6 *a*. Of a later date is the sherd fig. 6 *f*, from the earlier temple foundations, with a chain of lotus buds alternately black and red. It came from a kotyle of a class which dates from around the middle of the sixth century.[1] Fragments of toy kotylai of the type common from the sixth century onward were found in several parts of the site; also small parts of two kothons. The middle of the sixth century is represented further by a fragment, found in the long hall, of a Boeotian kylix decorated with flying birds (fig. 6 *b*). The inside has one of the usual black bands.

An interesting sherd from an imported pot is illustrated Pl. 37, 3. It is Laconian and came from the vase known as a lakaina. It has no slip; there is a purple band below the black and another above the palmette; purple also is the centre of the palmette; the band dividing the reserved zone is brown. In the inside a purple band is shewn in the drawing (fig 6 *c*) by lighter shading; the thin lines are brown. The fragment was found inside the temenos; the circumstances give no reliable information about its date, but from its style it is not likely to be later than 550 B.C.

The sixth- and fifth-century pottery from the temple deposit is largely plain black ware. Many fragments of black kantharoi were identified and some of black cups. True black-figure was rather rare. A sherd of sixth-century black-figure is illustrated fig. 6 *l*. The fragment fig. 6 *n* is from an Attic black-figure cup, and the one beside it, fig. 6 *m*, probably also from a black-figure cup. It has some letters incised in the Boeotian alphabet inside it (Inscription B 3(*a*), 2 and Pl. 37, 4) Other black-figure sherds from the deposit include the top of a lekythos of the later sixth century[2] and some fragments with floral ornament of poor quality.

The best black-figure sherds from the site were two pieces of one vase, found separately near the north doorway of the long hall. They are set side by side in the photograph (Pl. 36) rather more closely than in their true positions in the vase. The subject is a gorgon running with great strides; she looks to her right and faces the spectator; her arms strain wide; her wings are outstretched; her snakes glower and menace. The painting is slapdash in details but the picture is lively and exciting. The decoration on this side of the vase was probably filled out by a palmette on each side of the gorgon; a little of the left-hand one is seen in the photograph. The vase-shape has been identified with great probability[3] as

[1] Payne, *Necrocorinthia*, p. 334, no. 1516.
[2] See Ure, *Sixth- and Fifth-Century Pottery from Rhitsona*, p. 40: it is near to lip-type *j*.
[3] By Professor Ure.

a mastoid cup with short stem, a rather rare shape of which examples were found at Rhitsona.[1] The background is the pale red of the clay without slip. On the larger sherd is a foot with high boot turned over at the top, purple below the ankle, white above. Incision is used on the boot just above the ankle. It is also used for the belt. There are short curved bands on the wing, alternately white and purple. On the bodies of the snakes there are purple spots and the head of the larger snake has incised markings. The incision was omitted in the head of the smaller snake. The mark of white paint around the body of the larger snake is probably a spill; it shows up more in the photograph than in the sherd itself. The smaller fragment gives a part of the head in which the left eye is visible and the left corner of the mouth with, probably, a canine sticking up. The snakes have purple spots and incision as before; one of them is bearded. The object on the right of the sherd is a part of the other wing. The vase is black inside.

Fig. 7.—Inscribed Hellenistic Bowl. (Scale 2 : 5.)

It appears that two at least of the four snakes on these fragments come from the gorgon's belt. It is these large and aggressive snakes which make the picture unusual; the subject is a common one in Greek art;[2] large snakes sometimes attend the monster: but where as here they spring from her head and body they are more frequently small and form a simple fringe around the head, with perhaps a pair making a neat clasp for the belt.

Of red-figure pottery the only find of any note was a handle of a fine Attic krater with a small portion of the vase attached.

Pottery of the fourth century and of the Hellenistic period was very

[1] Ure, *op. cit.* pl. xxii, no. 5. 18; *B.S.A.* xiv, pl. xiii, *e*.

[2] I cite two examples only: a Chalcidian hydria in Tarquinia, Rumpf, *Chalk. Vasen*, pl. cxlv; a red-figure neck-amphora in Munich, Beazley, *Berliner Maler*, pl. 9. 1; in this the position of the hands is just as in the Haliartos fragments.

plentiful in the higher layers of the temple deposit and frequent also in the long hall. There follows a catalogue of the more significant pieces.

1. Black inscribed bowl of Hellenistic date found inside the long hall (fig. 7): diameter of rim ·14 m., of foot, ·065 m.: ht. ·062 m. Exterior: reserved are the foot, and parts near it which the glaze failed to cover: two fine incised lines just above the foot and a fillet in slight relief above them: above, an incised frame for the incised inscription (fig. 8).

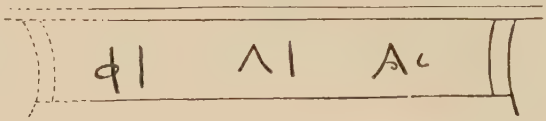

Fig. 8.—Inscription on Hellenistic Bowl.

The lunate sigma is very small and is little more than a flourish. Interior: black with a circle of stamped lines in the centre. This vase is closely paralleled by the three Boeotian bowls in Berlin, *Berlin Cat.* 2873–5 (pl. vii, no. 284) which have the same inscription.

Φιλίας is to be regarded as genitive of the name of a deity, and a word such as ποτήριον is to be supplied. Several other names of gods and goddesses in the genitive case occur on Hellenistic vases, *e.g.* Ἀγαθοῦ Θεοῦ, *A.M.*

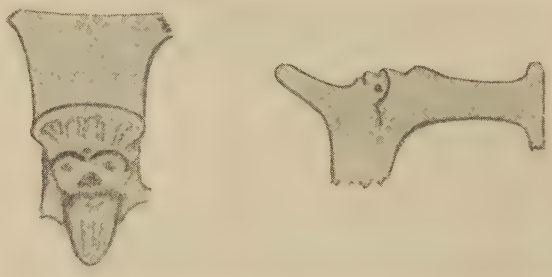

Fig. 9.—Comic Mask on Handle of Vase. View from above, and Profile. (Actual size.)

xxvi, p. 74, no. 17 (from Athens); Ἀφροδίτης, *Ibid.* p. 77, no. 23; Ὑγιείας, Φιλίας, *A.A.* 1910, p. 58.[1]

2. Handles from black vases with comic masks (fig. 9). Two almost identical examples were found, one in the long hall, one in the temple

[1] Since this was written Prof. Beazley, who referred me to these parallels for the 'Friendship' bowls, has kindly sent me his notes of the following additions: Athens no. 2500, Εὐημερίας; Skimatari (Tanagra), Ἔρωτος. Also, with a different kind of legend: Athens no. 12351, Παυσίλυπος; Athens, another vase with same number, Ἡδύποτος.

deposit. In the one shewn there is a piece of the rim attached. Comic masks are fairly common on black vases of the period, *e.g. A.M.* xxvi, p. 79.

3. Two large pieces of a black plate from the temple deposit (shewn in section, fig. 6 *h*): the groove around the central pit has red paint in it: outside this there is a thin incised circle and outside that again is a circle of painted decoration in white of this form ⬭OO⬭OO. There was a sharply set-up rim, which is broken off evenly all round. The part under the foot is reserved.

a *b*

FIG. 10.—OBJECTS OF CLAY.

a. Seated female figurine and bird figurine. (Scale 1 : 3.)
b. Clay rings (see Miscellaneous Objects, p. 202). (Scale 1 : 2.)

4. The foot of a large bell-krater which may be late fifth century or fourth century; it has two grooves with red paint in them, and a large E incised on it (see Inscriptions B 3(*a*), 7). From the temple deposit.

5. A very large number of fragments of black vases with stamped palmettes and circles of stamped rays in the inside: the prevalence of these was noted in the report on the previous excavation.[1]

[1] *B.S.A.* xxviii, p. 131.

6. Numerous fragments of small black bowls with ivy garlands outside, just below the rim: the stems incised, the leaves in white.

7. Several sherds from Megarian bowls: the best, from a " Homeric " bowl, has scenes of combat around the body and bands of leaf decoration below.

Miscellaneous Pottery.

1. The sherd shewn in Pl. 37, 6. It was found about a foot below the surface inside the temenos wall, associated with some ordinary classical black-glaze pottery. It comes from a very large wheel-made pot; the

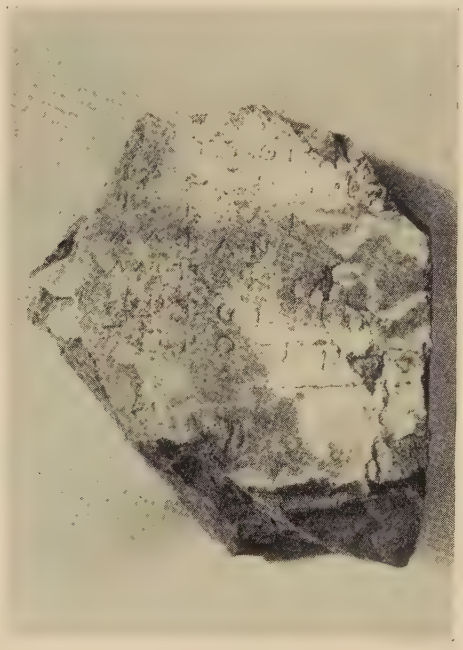

Fig. 11.—Part of Stoichedon Proxeny-Decree.

clay is red and of good quality; on the exterior a kind of slip forms a grey ground-colour; the design is painted in a matt black and a chocolate brown (the brown appears the darker in the photograph); the interior is unpainted and looks fresh and rather modern.

2. A handle of a large pithos, made to resemble a rope, *i.e.* moulded as if made of twisted strands, unpainted, has a small projecting button in the middle. From the long hall.

3. Quantities of fragments of black lamps of various periods.

4. Many Byzantine sherds, mainly from inside the long hall.

Terracotta Figurines.

A number of terracottas, generally mutilated and of poor quality, came from various parts of the site. The two illustrated in fig. 10 *a* are from the temple deposit. The seated female figurine on the left is almost complete but featureless and badly worn: the right arm is folded under the breast and the left arm stretched down along the body to the left knee. In the bird figurine on the right the head and under-part of the body are missing. The usual perforation is in an unusual place, in the back between the wings. The figurine was painted white and probably had markings in red. Other figurines in a fragmentary state were found in the same area.

The four broken-off heads shewn in fig. 14 came from various parts of the site. The lower one on the left originally had a broad stiff upright back-piece rising from the head-dress.

Inscriptions.

A. *On stone.*

1. Fig. 11.

[. . . . . προξε-]
[νον εἰμεν Βοιωτων]
[αὐτον κ]η ἐ̣κ̣γ̣[ονωσ κ-]
[η εἰμε]ν αὐτοισ γα[σ κ-]
5 [η Fοικ]ιασ ἐ̣ππα[σιν]
[κη πο]λ̣ιτειαν
[κη ἀσ]φαλιαν
[κη τἀ]λ̣λα παντα
[καθα]π̣ερ τοισ
10 [ἀλλοι]σ προξενοισ

Found outside the western arc of the temenos wall. Ht. ·22 m.; wdth. ·20 m.; th. ·10 m.; lettering ·008 m. Inscribed on local limestone; stoichedon. Stone complete rt.; mutilated top, bottom, left.

This fragment is part of a proxeny-decree and is probably to be dated in the second half of the fourth century. The letter-forms are near to those of a catalogue of conscripts from Thespiai which belongs to about that time.[1] The dialect is the older Boeotian one with but slight influence of the κοινή.

This inscription may be regarded as a companion-piece to another stoichedon proxeny-decree from Haliartos (Ἐφημ. 1909, p. 55) which is very probably of about the same date or a little later.[2] The restorations given for ll. 1, 2, of the newly-found decree are based on the text of the other

[1] Δελτ. 1923, p. 218 and fig. 7; *J.H.S.* 1932, p. 98. [2] *J.H.S.* 1932, p. 100.

one, as also is [Ϝοικ]ιασ in l. 5: it is true that the digamma might be omitted in Boeotian inscriptions of this time, and if we omitted it here we should avoid the necessity of having sixteen letters in l. 4 compared with fifteen before and after. But the extra letter in l. 4 is vouched for, as the photograph shews, by the crowding of ισ in αὐτοισ to occupy a single letter-space.

A peculiarity of the inscription is that whereas the preamble of the decree was engraved in full stoichedon lines without regard to syllabic word-division, when the engraver came to the privileges granted he placed each on a separate line. A sequence of unfilled lines of this kind beginning with καί is found elsewhere, but generally in non-stoichedon inscriptions, *e.g.* at Argos, *I.G.* IV, 614, at Rhodes, *Clara Rhodos*, II, pp. 192, 194. The discovery of another stoichedon inscription in Boeotia is of interest, for the style is not common there except at Oropos, which by reason of its position and history stands somewhat apart.

Equally interesting is the inclusion among the rights granted to the proxenos of πολιτεία, citizenship. The privileges of proxenoi varied not only from one city to another, but from one individual to another. In general citizenship was not granted: at Athens, for example, it was too jealously guarded to be given in this way. There were exceptions, as certain Ionian cities[1] and, on the mainland, certain Thessalian cities, notably Lamia, in which city πολιτεία regularly went with προξενία.[2] In Boeotia it was very rarely given.

The other privileges named in this inscription, γῆς καὶ ὀικίας ἔππασις (= ἔγκτησις) and ἀσφαλεία, are among the commonest in such decrees.

The phrase πρόξενον εἶμεν Βοιωτῶν, if correctly restored, indicates that the decree was passed by the people of Haliartos not *per se* but as members of the Boeotian Confederacy.[3]

2. Fig. 12.

ἀ(λ)λα π̣ρ̣[ντα καθαπερ]
τοισ ἀλλοισ προξε-
νοισ

Found in an angle of the long hall. Ht. ·42 m.; wdth. ·36 m.; th. ·075 m.; lettering ·015 m. Inscribed on white marble; non-stoichedon; stone complete bottom and sides.

This is the final phrase of a proxeny-decree similar to no. 1. If the letter forms serve as a guide it should be slightly later than no. 1, probably dating from the early part of the third century B.C. It has the later form Ξ, whereas no. 1 has Ϡ.

[1] e.g. *Inschr. v. Magnesia a.M.*, 2, 4, 6, etc.
[2] *I.G.* IX, ii 60, 61, etc.
[3] See Historical Appendix, p. 210 *infra*.

B. *On Vases.*

1. The Athena Inscription (fig. 4). Total length of sherds extended 15 cm.: for details of the discovery of the inscription see under Temple Deposit (pp. 186–7). In the photograph no letters are visible on the fourth sherd, but actually it contains the lower half of the final αι of 'Αθαναι and the lowest portion of the α of ἀνεθεκε. The only letter wholly missing is the ν after this alpha. The kylix from which the inscription came was evidently of a normal kind, and was probably very like the Rhitsona

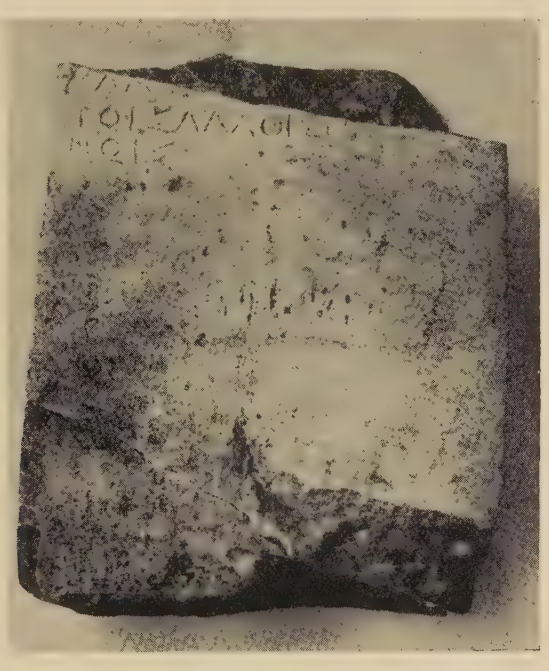

Fig. 12.—End of Proxeny-Decree.

example, grave 112, no. 51.[1] From the finds associated with the inscription a date not far from 500 B.C. should be expected for it, and on epigraphical grounds such a date is highly probable. The alphabet used is a transitional one, no longer severely archaic but not sufficiently advanced to be called classical. It will be observed that the alpha is not the formal Boeotian type with a broken hasta. The plain kind is very frequent on vases (cf. the large group of sixth-century vase-inscriptions from Rhitsona, *B.S.A.* xiv, p. 263, fig. 12, where the plain type is far commoner).

The inscription is in the archaic Boeotian dialect. The form of it is

[1] Ure, *Sixth- and Fifth-Century Pottery*, p. 38.

usual and needs no comment. The dative Ἀθαναι is paralleled by *I.G.* VII, 2230. The name of the dedicant Mnasigeneis (to give it the Boeotian rendering) was a favoured one in the Copaic region: other examples previously known from there are one from Orchomenos (VII, 3191) and one from Kopai (VII, 2788). Another occurred at Thespiai (VII, 1780). All these are of much later date than the Haliartian example.

2. Shallow bowl of Hellenistic date inscribed Φιλίας: see under heading Pottery (p. 194).

3. Other inscribed sherds:—

(*a*) from the temple deposit (Pl. 37, 4).

ΑΛΛΙΑ: incised on sherd from rim of a vase covered with a fine silvery black glaze.

Καλλιασ [τάθαναι ἀνεθεκε]?

ΕΝ: incised on the inside of a sherd from a cup (fig. 6 *m*).

ΤΕ: incised between incised lines on the rim of a shallow black bowl of Hellenistic date.

Φ: sherd from a smaller Φιλίας bowl?

Α: sherd from a black vase of Hellenistic date.

Α: a single letter incised on a handle from a skyphos or from a squat kylix with short thick stem, dating from about mid-fifth century.

Ε: incised on the foot of a large vase, probably a bell-krater.

Η: on a sherd from a black vase of late fifth or of fourth century.

(*b*) from other parts of the site.

DITO from the long hall: carefully incised on the rim of a good black vase.

Ρ: from the long hall: incised on a sherd from the rim of a small black bowl.

Η: from the long hall: incised on the handle of a kantharos like the Φιλλιχος vase from Rhitsona.

I□I: between the south temple wall and the temenos wall; coarsely incised on a sherd from the rim of a black kantharos.

Bronze Objects.

1. Part of the leg of a tripod with engraved pattern (Pl. 37, 5): found beside the older temple foundations: length 25 cm., width 4·3 cm., thickness ·25 cm. The strip consists of two joining pieces and is broken off at top and bottom. A thin slip has been cut away on the right at the top. Two rivets stand out on the left shewing that one or more similar strips were fastened to this one. The leg of a tripod of this type was usually formed of a number of these strips fastened side by side. An exact parallel to the pattern occurs on a tripod from Olympia, v. *Ol. Bronzes*, Plates, IV.

34 *c*. It is classified by Miss Lamb [1] under Geometric tripods, type 2, and placed somewhat later than the beginning of the Geometric period.

2. Arrow-head (fig. 13): length 2·3 cm.: found beside the older temple foundations: it is perfectly preserved and has a hollow socket and three flanges.

3. Handle of a bowl: 7·3 cm. across: found in the deposit: there was a stud projecting from the middle of the handle.

4. Small bracelet: diameter 6 cm.: found near the break in the later temple foundations: it is of the plain overlap type with slightly flattened ends.

5. Circular tally, with large letter M on obverse and hole for stringing: diameter 2·5 cm.; from the long hall.

6. A small group of bronze finger-rings and spirals, mainly from the lower levels of the deposit: one of the rings has an oval flattened bezel with a rivet through it. The setting is lost.

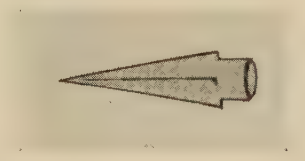

Fig. 13.—Bronze Arrow-head. (Actual size.)

7. Remains of several bowls were found in and near the temple, but all in very poor condition. Portions of three phialai mesomphaloi (shallow libation bowls) were recognized. Of one of them sufficient remained to allow the diameter to be determined as about 21 cm.

Coins.

1. Long hall, south doorway. Theban, bronze; *B.M. Coins, Central Greece*, p. 85, no. 173. (Date *circ.* B.C. 378–338.)

2. Inside the long hall; ·3 m. deep. Theban, bronze; size ·45 in.: to be assigned to the group, *B.M. Coins, Central Greece*, p. 85, nos. 175–177. (Date *circ.* B.C. 378–338.)

3. Temple deposit; ·9 m. below surface. Euboean, bronze; *B.M. Coins, Central Greece*, p. 97, no. 22. (Date *circ.* 369–336 B.C.)

4. Inside the long hall; ·6 m. deep. Lokrian, bronze; *B.M. Coins, Central Greece*, Pl. II. 8. (Date *circ.* 338–300 B.C.)

5. Inside the long hall, near surface. Boeotian, bronze; *B.M. Coins, Central Greece*, p. 43, no. 108. (Date *circ.* 196–146 B.C.)

6. Inside the long hall; ·4 m. deep. Venetian, bronze; die similar

[1] *Greek and Roman Bronzes*, pp. 45, 46.

to Schlumberger, *Numismatique de l'Orient Latin*, Pl. XVIII, no. 9. (Date 1382–1400 A.D.)

7. Near the break in the later temple foundations, surface. Thessalian? bronze; diam. ·016 m.: Obverse, Pallas with helmet, r. Reverse, man riding a trotting horse r., his arms outstretched over the horse's neck, some letters in the field, O M N?

8. Picked up on the road near the site. Tanagra? bronze: the coin is too much damaged to permit of complete identification but the die is like *B.M. Coins, Central Greece*, p. 61, no. 24.

Fig. 14.—Terracotta Heads. Fig. 15.—Glass and Stone Beads.
(Scale 2 : 3.)

9. Inside the long hall; ·4 m. deep. Bronze; size ·0124 m.; one side surface destroyed: on the other ·Φ·.

Miscellaneous Objects.

1. A number of glass and stone beads from various parts of the site (fig. 15).

2. Unpainted clay rings (fig. 10 *b*); diameter *circ.* 5 cm., height *circ.* 1·5 cm.; approximately square in section. Besides those shewn, many fragments of others came from all parts of the site. The precise use of these rings is uncertain, but they may well have been stands, either for lamps or for one of the types of vase which had round or pointed bases.

3. An iron spear-head.

4. An obsidian arrow-head and many flakes of obsidian: some chips of flint.

5. Loom weights; a stone pounder; part of a bone spatula; a knife blade with a ring attached, of no great antiquity; a large iron nail.

Conclusions.

The identification of the temple as an Athena-temple has been treated at length in an earlier section (p. 187 above). The worship of Athena was already known to have been firmly established in the Copaic region. At Koroneia there was the famous temple of Athena Itonia. Another Athena-temple of great age and sanctity was near-by at Alalkomenai,[1] where also Athena was held to have been born. The discovery, therefore, of a centre of her worship at Haliartos is in no way surprising.

As for the temple itself, in spite of its ruined condition and the disappearance of the greater part even of its foundations it is possible to arrive at certain conclusions in regard to it. It was of the Doric order: so much is proved by the details of its façade. Its foundations were of hard bluish limestone: its walls were probably of the same material, very possibly in the polygonal style of masonry, though there is no direct evidence on this point; its columns and entablature were of poros thinly coated with white stucco and in certain parts painted red. It had the terracotta revetments customary in such temples. In style and plan it is fairly certainly to be classified as distyle in antis. For its slight width, only just over 7 m., shews that we have not here to do with a peripteral temple: no peripteral temple has been found with such a narrow stylobate. Nor is it likely that there were any columns at the west end. The form of the surviving foundations, an outer shell, filled in with building chips, suggests that they supported the back-wall and the rear end of the two side-walls of the cella, not a row of columns standing before a wall, for in that case an additional line of foundations would have run across under the wall. On the other hand, the finding of several pieces of column drums amid the débris of what is presumed to have been the eastern façade makes necessary the assumption that columns stood at the east end. The porch, therefore, was at the east end, as was usual in temples which, like this one, lay east and west.

This sanctuary is accordingly to be regarded as having been comparable in style and plan to a number of other small buildings of the same period, though its dimensions do not accord very nearly with any other. Nearest perhaps was the Treasury of the Megarians at Olympia, a distyle in antis building 6·4 m. by 13·4 m., whose date was round about 520 B.C. The Treasury of the Athenians at Delphi (date *circ.* 510?) was also distyle in antis and of about the same width as the Haliartos sanctuary but very

[1] Homer, *Il.* iv, 8; Strabo, ix, p. 413; Paus. ix, 33. 4.

much shorter. The nearest parallel among temples proper was probably the older temple of Themis or Nemesis at Rhamnus (date *circ.* 510), whose dimensions were 6·4 m. by 10·7 m. It was likewise distyle in antis and had walls of polygonal masonry, but they were of marble.

Date of the Sanctuary.

The conclusion reached after the 1926 excavation was that the temple was built not later than 500 B.C., and that it survived at least until Hellenistic times. The new excavation has produced a little more evidence on both these points and it now seems that the date of building should be placed nearer to 550 than 500. The earlier pottery and the architectural terra-cottas both demand a fairly early date in the second half of the sixth century, though it must be admitted that the hypothesis that an earlier temple stood on very much the same site carries with it the possibility that any of the earlier finds may belong to the earlier building. On the whole, however, it is reasonable to suppose that the deposit and the painted antefix were contemporary with the later temple and may be used as evidence for its chronology. As to the date of abandonment of the sanctuary, the evidence of the new excavation makes it clear that this was not just at the beginning of the Hellenistic period, but some time later. The sherds of relief ware found in the higher strata of the deposit and within the long hall belong to the third century or after, and the numerous coins from the Hellenistic period found in the sanctuary area both in 1926 and in 1931 point in the same direction. It is by no means unlikely that the sanctuary survived until the fall of Haliartos in 171 B.C. and that the Romans were responsible for its destruction. The thoroughness of the Roman sack of the place[1] would account very well both for the ruinous condition of the temple when seen, as I have suggested, by Pausanias, and also for the comparatively meagre harvest which the excavation of it has produced.

Significance of the Long Hall.

The discovery that the long hall, though actually outside the precinct, is reached by the same entrance, namely by way of the paved passage, indicates that the long hall was a building of a public character and probably associated in some way with the temple. It is unfortunate that the excavation of it produced so little evidence to determine its identity. The discovery of many fragments of pithoi in and around the building inevitably suggested its use as a store-chamber. The practice of building a store-room near to a temple was common enough and we have numerous instances, *e.g.* the Chalkotheke on the Acropolis at Athens, a storehouse for votive offerings and bronze implements. But a store-room is not the only possibility. At

[1] See appendix on the history of Haliartos (p. 211 below).

Aegina there was a variety of buildings associated with the Aphaia-temple, among them an Amphipoleion,[1] the living-quarters of the priest or temple servants. It is difficult to believe, however, that a storehouse of the size of the long hall would be needed in connection with such a small temple as the Haliartian one, nor do the features of the long hall very strongly suggest that it was an Amphipoleion. Its form and size are perhaps most closely paralleled by a building of an entirely different character, the Lesche or club-house of the Knidians at Delphi. This also was a simple rectangular room. Its dimensions were very near to those of the Haliartian hall, namely 18·7 m. × 9·5 m. Its roof was supported in the same manner, by wooden pillars set on bases, but instead of one line of four bases as at Haliartos, there were two parallel lines of four bases. There was probably a single door in one of the long sides. The identity of the Lesche was established owing to the description of it given by Pausanias (x, 25–31). In the circumstances it is unlikely that a definite conclusion can be reached as to the purpose of the Haliartian hall, and the verdict must remain open.

Appendix on the History of Haliartos.

The history of Haliartos is derived from scattered references in a dozen ancient authors ranging in date from Homer to Pausanias. These references are all more or less incidental, since Haliartos at no time played a leading part in Boeotian affairs, but they are well worth collecting for the sake of their bearing on some of the major issues of Boeotian history, and it is convenient to bring them together here so that the historical evidence and the archaeological evidence may be co-ordinated.

The earliest mention of Haliartos is in Homer. Among the Boeotian cities in the Catalogue of Ships, Haliartos comes between Koroneia and Plataia.[2] Homer gave the city the epithet 'grassy' (ποιήεις), which apparently was appropriate, for it stuck fast and is quoted time and again by Strabo, while the poet Nonnus imitates it and at the same time explains it by speaking of 'watery Haliartos' (ὑδρηλή, *Dion.* xiii, 71). That Haliartos sent warriors to Troy is easily credible. Its earliest system of defences, and the one which even now survives better than any of the others, was the great 'cyclopean' wall built around its Acropolis by the men who inhabited it in the centuries immediately before the Trojan War. This is a typical 'Mycenaean' defence work and its stoutness and solid construction are adequate proof that a considerable settlement existed there at the time.

It will be clear to anyone who studies the topography of this part of Boeotia, even with the aid only of a large-scale map, that the dominating factor in Haliartian history was its key position on the main road through

[1] *I.G.* IV, 39, and Furtwängler, *Aegina*, p. 490.

[2] *Il.* ii, 503.

Central Greece. It controlled the pass between Helikon and Lake Copais, which when the lake was full was the only military road between Central and Western Greece. The strategic importance of the position, to which the city doubtless owed its foundation, would ensure also that it would be kept under the surveillance of whatever power was dominant in Boeotia. In the later Bronze Age it is generally agreed that Orchomenos was the paramount state, and although the Minyans of Orchomenos, according to tradition,[1] succeeded in draining the Lake of Copais and so were less dependent on the Haliartian gap for their communications, it is certain that there was a close association between Haliartos and Orchomenos. The traditional genealogies given by ancient writers [2] make the founders of Orchomenos and Haliartos coeval and united to one another by family ties.

With the coming of the Iron Age there emerges gradually the Boeotian Confederacy under the headship of Thebes; thenceforward Thebes is the leading city of Boeotia.[3] The drainage works of the Minyans had fallen into disuse and Copais was again impassable, a lake in winter, in summer a marsh. Accordingly, it was of vital importance to the Thebans that the Haliartians should be well disposed towards them, and it may be regarded as certain that they took measures to secure this. Haliartos was one of the first towns to place on its coins the symbolic shield of the Confederacy, and there is no reliable evidence of any attempt on the part of the Haliartians to break away from Theban leadership until Roman times. It is true Pausanias affirms [4] that at the time of Xerxes' descent on Greece Haliartos refused to acquiesce in the Medising policy which was adopted by the Thebans and most of the other Boeotians, and that a detachment of the Persian army burnt the city, but it has been shewn [5] on the literary evidence that this is very unlikely, and that Pausanias probably misread his authorities. It may be stated here that the available archaeological evidence is in accord with the literary evidence, and that the excavation of the Athena-temple gave no indication whatever of any burning in 480 B.C.

The fifth century was in Boeotia by no means the period of enterprise and achievement which we are accustomed to consider it when dealing with Attic history. Just before the opening of the century the Thebans had tried to coerce Plataia into membership of the Confederacy: the

[1] Strabo ix, p. 415.

[2] See Paus. ix, 34. 5; 36. 3–4; Homer, *Il.* ii, 511 ff.; according to these genealogies there were six or eight generations between the founding of Haliartos and the Trojan War, a reckoning which would throw the date of its foundation back to the fifteenth century B.C. Cf. on the date of the 'Mycenaean' walls, *B.S.A.* xxvii, p. 82.

[3] The importance of Thebes in relation to Orchomenos in the Late Bronze Age are far from clear, but it is certain that Thebes was even then a formidable power.

[4] ix, 32. 4.

[5] *Journal de Philologie*, N.S. 1895, pp. 109–15.

Plataians successfully sought Athenian support in their resistance and in a battle which followed in 506 the Confederate forces were soundly beaten. A quarter of a century later the inauspicious part played by Thebes in the Greek struggle with Persia must have produced a sense of inferiority [1] and a weakening of the sentiment of Boeotian unity which would take fully a generation to remove. The final disaster came in 457 when, after the battle of Oinophyta, the Athenians took from Thebes the control of all the Confederate cities and made them virtually a part of the Athenian Empire. For this half-century there is nothing to record which specifically concerns Haliartos.[2] The subsequent battle which in 447 put an end to this series of humiliations and redeemed Boeotia from Athenian rule was fought at Koroneia near Haliartos, and the Athenian general Tolmides was marching towards Haliartos from the west on the way back to Attic territory when he was attacked and defeated. In 424 the Athenians made an attempt to avenge the losses of Koroneia, but it met with no success. Their general Hippokrates was defeated at Delion by a combined Boeotian army of which it is recorded that the men of Haliartos and the other cities round the lake formed the centre.[3] The Athenians were sufficiently occupied elsewhere for the rest of the century to prevent them from interfering again in Boeotia.

The early years of the fourth century saw one of the most noteworthy events in the whole history of Haliartos, namely the attack of Lysander the Spartan on the city and his defeat and death outside the walls. The story is preserved in longer or shorter compass by four ancient writers, Xenophon, Plutarch, Pausanias, Diodorus. The main facts are as follows. The Boeotians, who had been in alliance with Sparta up to the time of the downfall of Athens, were alienated by her behaviour after her victory. An open display of hostilities did not come until 395, when Sparta intervened on behalf of the Phokians in a border dispute between them and the Opuntian Lokrians, who had appealed to Thebes for help. The Spartan intervention was inspired by Lysander,[4] whose plans were really directed towards an invasion of Boeotia. He intended to come down on Boeotia from the north, seeking to detach from Thebes the cities he passed on the way. Pausanias the king was to enter Boeotian territory from the south and Lysander arranged to join forces with him at Haliartos—excellent tactics if they had succeeded, for, having reduced Haliartos or brought

[1] See the notable passage in Pindar, *Isth.* vii, 5–16. Even fifty years afterwards the Thebans could feel the sting of this reproach, and the need to explain away the conduct of their city (*e.g.* Thuc. iii, 62).

[2] It has been suggested by Head (*B.M. Coins*, *Central Greece*, p. xxxix) that the silver coinage of Haliartos with an amphora on the reverse side may have been issued to signalise the autonomy of their municipality by the democratic party which ruled in Haliartos during the decade of freedom from Theban control.

[3] Thuc. iv, 93.

[4] Plutarch, *Lysander* xxviii.

it over, the combined Spartan forces would have had no further obstacle between them and Thebes, which is only fifteen miles away. Lysander detached Orchomenos from the Confederacy and approached the Haliartians to induce them also to revolt. But the Thebans had forestalled him; there was a body of them already in the city and the inhabitants remained firm in their allegiance. Moreover, King Pausanias had not arrived. Lysander could not remain inactive; a conflict took place outside the walls of the city in which he himself was killed and his army routed. When the king came he did not renew the battle but bargained for the bodies of the slain, which lay under the walls, Lysander among them, and left Boeotia by the westward route into Phokis. This is the outline of the story. The authorities differ considerably in some of the details. Xenophon's account as that of a contemporary is most valuable but coloured by his partiality towards the Spartans. He makes every excuse for them in what was in truth a rather discreditable episode. He attributes the action entirely to the Thebans and represents them as having been there in force. The considerations which decided King Pausanias not to renew the battle are set out at full length, and Xenophon obviously wished to shield him from the charge of cowardice on which he was tried when he returned home.[1]

Plutarch's Life of Lysander adds a number of points not found in Xenophon. He explains the failure of the two Spartan leaders to meet at Haliartos by the fact that Lysander's despatches to Pausanias fell into the hands of Theban scouts; the Thebans thereupon marched to Haliartos, reaching it slightly before Lysander; some of them went inside, some remained without; those inside, when they saw Lysander drawing near for an attack, opened the gates and rushed out upon him, while the other Thebans came round by the spring of Kissousa, keeping the city on their left, and attacked the outermost portion of the enemy forces.[2]

Two significant points arise out of the story as told by Plutarch. The strategy of the Thebans who stayed outside the city proves that there was a path between the edge of the lake and the cliffs which form the northern extremity of the Acropolis. It shews also that there was a Spartan attack developing on the western or south-western quarter of the city. Now it was on this side that in the excavation made in 1926 an important gateway was found in the Acropolis walls, with two of the threshold blocks still intact, and the deep cut of wheel-tracks in one of them. It is possible, therefore, that by these gates[3] the Haliartians and Thebans rushed out upon Lysander as he was preparing his attack.

The accounts of the incident given by Diodorus and Pausanias are

[1] *Hellenica*, iii, 5. 17–25.
[2] *Lysander*, xxviii.
[3] It is uncertain whether there was an outer town-wall at this date.

much shorter. Diodorus [1] adds nothing new. Pausanias [2] differs in stating that the Spartan king at the news of Lysander's death hastened towards Thebes as though to attack it, but desisted and made a truce on hearing of the impending arrival of a force of Athenians.

The question of the conduct of the Spartan king cannot be re-examined here, but it seems clear that he found himself almost completely hemmed in. On the west were the victorious Haliartians and their Theban helpers; on the east Thebes itself; in his rear, if Pausanias is right, the Athenians; northward the lake and mountains. In the circumstances the only alternatives were an armistice or almost certain defeat. He naturally chose the western route for withdrawal after the truce because it was the speediest way to friendly country. The Spartans had with them the bodies of those slain in the encounter before the walls [3] and desired to bury them as soon as possible.

As for the body of Lysander himself, Plutarch says it was buried in the first allied territory they came to, which was at Panopeus in Phokis. He adds that in his time the tomb was still there beside the road from Chaironeia to Delphi. As Plutarch was himself a native of the region this is strong testimony. Pausanias, however, twice states that the tomb of Lysander was in Haliartos.[4] This on the face of it is very unlikely. One of the main points which King Pausanias sought to gain by his abject bargain with the Thebans was the recovery of Lysander's body, and it is inconceivable that having received it he should bury it in hostile country. Pausanias's story is not difficult to account for. It may be presumed that he went to Haliartos as a visitor in search of 'copy.' If so, nothing is more likely than that he was shewn a 'tomb of Lysander.' The believing visitor may still be shewn a 'tomb of Lysander' at Haliartos to this day.

The failure of Lysander and Pausanias at Haliartos led the Spartan ephors to recall the other king Agesilaus who was in Asia. He returned overland in 394, and events again shewed the strategic importance of the road which Haliartos commands, for a combined force of Boeotians, Athenians, Argives and Corinthians took up their position nearby at Koroneia to block his march. Though they were defeated the victory was not decisive enough to allow Agesilaus to press on southward through Boeotia, and he reached Peloponnese by crossing the Corinthian Gulf from Phokis.

The next recorded event in connection with Haliartos occurred a few years later during the brief occupation of the Theban citadel by Spartan troops between 382 and 378. The story is found in Plutarch's treatise *De Genio Socratis*, ch. 5 ff. By order of Agesilaus, so the narrative relates, the grave of Alkmena at Haliartos was excavated and there were found in it a bronze bracelet, two jars full of 'petrified earth'

[1] xiv, 81. [2] iii, 5. 3. [3] Xenophon *l.c.* [4] ix, 32. 4; 33. 1.

and an inscribed bronze tablet. Agesilaus had these discoveries brought to Sparta and sent a copy of the inscription to Egypt for interpretation. The reply was that it contained a message from Herakles that the Greeks should stop fighting and cultivate the Muses.[1]

The interpretation of this 'writing' was, of course, a hoax; and there is a strong inherent improbability in the alleged discovery of an inscribed bronze tablet in a tomb of the prehistoric period. The actual finding of a tomb at Haliartos and the order that it should be excavated are very possibly genuine, and we may admire the antiquarian curiosity of Agesilaus. It had, however, the sequel that might be anticipated. An oracle ordered the Spartans to restore the tomb and propitiate the dead with libations.

The most significant point in the whole story would seem to be the tacit assumption it contained that a commander who controlled the citadel of Thebes might do as he pleased in Haliartos The dependence of the federated cities is thus clearly demonstrated.

The deliverance of Thebes from Spartan occupation was followed by a revival and reconstitution of the League which is apparently signified by creation of the office of federal eponymous archon, and from this time onward many Boeotian inscriptions of a public character were headed with the name of this archon. The honorary decree from Haliartos of about 300 B.C., Ἐφημ. 1909, p. 55, which has been mentioned earlier (p. 197), is a case in point. The text of it begins:—

> Πολυξένω ἄρχοντος Βοιωτοῖς ἔδοξε τῶι δάμωι
> Ἱπποκράτην Φιλοκτήμονος Παριανὸν πρόξενον εἶμεν Βοιωτῶν,

indicating that the decree ranked as a federal document.

The abundance of objects of fourth-century date found at Haliartos seems to shew that the city flourished at this time. A period of prosperity is a natural assumption for the brief interval of Theban hegemony in Greece. And while the destruction of Thebes by Alexander in 335 deprived the Confederate cities of political importance, it did not imperil their existence.

In the third century the continued survival of the city is attested by inscriptions and other objects, but no historical event can be associated with it until the earlier half of the second century. By this time the influence of Macedonia, which had been strongly felt in Greece throughout the third century, had been superseded by the influence of Rome as a result of the defeat of Philip V by the Romans at Kynoskephalai in 197 B.C. But in 179 B.C. Philip V's son Perseus succeeded him and soon made it evident that he intended to recover the power once exercised in Greece by Macedonia. The Romans did not allow Perseus to make much progress before they took action. The advent of a Roman army in 171 forced the

[1] On the T. of Alkmena see now Persson, *Ark. Stud. tillägnade Kronpr. Gust. Adolf*, 295/307.

Greeks to range themselves on one side or the other. In Boeotia opinion was sharply divided. The trend of events there is thus narrated by Livy. 'Envoys of Perseus returning from Rhodes approached the cities of Boeotia—Thebes,[1] Koroneia and Haliartos,—which were thought to have been forced to abandon the alliance of Perseus and join the Romans against their will. The Thebans, although they had some reasons for resentment against the Romans, were unaffected. But the men of Koroneia and Haliartos, influenced by some natural disposition to favour the dynasty, sent envoys to Macedonia to ask for a garrison to give them protection against the overweening arrogance of the Thebans. The king's reply was that owing to terms of truce between himself and the Romans he could not send a garrison: he warned them, however, to see to it that their reprisals against the Thebans did not bring down the vengeance of Rome upon him.' [2]

The Haliartians, reinforced by some of the younger men from Koroneia, now decided to defy the Romans. The city was besieged by the praetor Gaius Lucretius and his brother Marcus, and the inhabitants made a fierce resistance. *Animis magis quam viribus resistebant* is Livy's phrase. They made frequent sallies to destroy the Roman siege-works, and hastily built new defences when breaches were made in their walls. At last the outer town-wall was taken and there was an indiscriminate slaughter of the inhabitants. The army took refuge within the Acropolis but surrendered next day. There were about 2,500 of them according to Livy. They were sold as slaves and the city razed to the ground; its ornaments, statues, pictures and everything of value were carried off by the victors.

Two years later the Athenians applied to the Roman Senate for a grant of the Haliartian land. The Senate gave it to them and they entered into possession; several of the boundary-stones which they set up to mark it off have been found.[3] This action brought upon them the keen censure of the historian Polybius. He considered that by wiping out the memory of 'almost the oldest city in Boeotia' and destroying the hopes of its dispossessed people they did something 'utterly unworthy of the character of their city.' [4]

It appears that a community of some kind still existed at Haliartos after its destruction, and that an Athenian epimelete administered it. There is an inscription from Haliartos [5] of a later date than 169 B.C., recording an honour paid by a club of huntsmen to their treasurer Antagoras, who was also the Athenian epimelete. Dittenberger [6] held that

[1] This should be Thisbe. Livy's mistake was apparently derived from Polybius xxvii, 5, where also Θίσβας should be read instead of Θήβας; see *C.A.H.* viii, 260 *note*. In the remainder of the passage quoted above the Thebans are correctly represented as having maintained loyalty to Rome.

[2] xlii, 46.

[3] *B.S.A.* xxviii, p. 137, nos. 10, 11.

[4] xxx, 18.

[5] I.G. vii, 2850; it is dated by the name of the Athenian archon.

[6] *ibidem*, note.

the inscription proved the re-establishment of the city, but this cannot be maintained.

The community consisted of settlers who tilled the soil for the benefit of the Athenians.[1] In an excellent hunting country like Copais it was natural that they should have a hunting club, and natural too that the Athenian epimelete should be invited to hold office in it. But Haliartos as a city never rose from the wreck of 171. Polybius expressly denies its rehabilitation by the Athenians. Strabo, writing in Augustan times, said, Ἁλίαρτος νῦν οὐκέτι ἐστίν, and Pausanias in the second century A.D., as we have seen earlier, found the sacred places of the city in ruins, and even the names of most of its divine guardians forgotten.

R. P. Austin.

Additional References.

Topography: *R.E.* art. Haliartos; Frazer on Pausanias ix, 24. 2; 32. 5; 33.

Traffic through the Haliartian gap, an early reference: *Hymn to Apollo*, 257–266.

Provision of a Boeotarch by Haliartos in turn with Lebadeia and Koroneia: *Oxy. Pap.* v, p. 171.

Celebration of Cretan Theodaisia at Haliartos: *Oxy. Pap.* xvii, no. 2080, Callimachus, *Aetia*, bk. ii, l. 86 ff.

Pre-Hellenic pottery found at Haliartos before these excavations: Fimmen, *Kretisch-Mykenische Kultur*, 1921, pp. 6, 78.

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[1] Strabo writes (ix, p. 411) as though this state of affairs still existed in his day: there is nothing to shew how much longer it continued. The single Attic coin of the second century A.D. found in the 1926 excavation (*B.S.A.* xxviii, p. 139, 6) is not a conclusive witness, as it may have been dropped by a visitor, Pausanias or another.

THE IONIAN ISLANDS

(Plates 38–42).

1. Zakynthos
2. Kephallenia
3. Ithaka
4. Leukas
5. Meganisi
6. Arkoudi and Atokos
7. Kalamos
8. The Archipelago
9. Coast of Akarnania and Aetolia
10. Astakos
11. Kythera

My first literary pilgrimage to the Ionian islands took place six years ago. I still find them an attractive field for research, and the present paper records observations made among them during two very pleasant summers. In this connection I would recall the fact that both Professor Chadwick [1] and Professor Childe [2] have indicated the importance of a study of North-West Greece for the better understanding of the coming of the Greeks.

1. Zakynthos.[3]

Zakynthos has been little visited by archaeologists, the most recent being Riemann [4] and Schmidt.[5] They relied principally on Chiotis [6] or tradition (which are often synonymous) and they had no interest in sherds.

Wheler [7] noticed the peculiar indifference of the Zantiotes to their ancient history. Later, when traversing an archipelago inhabited by Homeric scholars thirsting for debate, I learnt to appreciate this quality, but it made the initial stages rather difficult. My method was to go to a recorded site and to take my seat in the nearest kapheneion to ask and answer questions.

Basiliko in the South seemed to be a promising name, and Riemann [8] mentions tombs in the neighbourhood. With the help of Mr. Richard Sargint I was able to make some discoveries in this neighbourhood. The large dot on the neck of Cape Gerakini represents an obsidian blade (Pl. 40*b*, no. 7). North of this point stone has been quarried at intervals up the East coast till one arrives at Kalogeros (Pl. 39). Just before the headland, at the point marked A, a line of four squared stones may mark a

[1] *The Heroic Age*, pp. 437, 456.
[2] *The Aryans*, p. 55.
[3] On the map (Pl. 38) I have used the medieval name, Zante.
[4] O. Riemann, *Recherches Archéologiques sur les Iles Ioniennes*, 1879.
[5] B. Schmidt, *Die Insel Zakynthos*, 1899.
[6] Χιώτης, Ἱστορικὰ Ἀπομνημονεύματα.
[7] Wheler, *Travels in Greece*, 1647, p. 41.
[8] Riemann, *op cit.* Zante, p. 11.

temple deposit. In the pile of mud above these I found a terracotta disk representing a cow suckling a calf (fig. 1).

Representations of suckling animals are rare, except on coins and gems. There may have been one at Lindos in wood,[1] and there is one on the Harpy Tomb in the British Museum. It was a favourite motive in Mycenaean times.[2] Geometric animals, when suckling, kept their heads turned forward,[3] but with the arrival of the orientalising style heads turn back and Rhodian stags[4] outline their horns against their bodies. To compose this attitude into a group is but a step. The cow is lean and bony, like Peloponnesian animals, and the calf is a mere wriggle. Though the earliest Syracusan coin is very close to our group and is said

Fig. 1.—Clay Disc from Kalogeros, Zakynthos. Scale 1 : 1.

not to be earlier than 580, it has an archaising look, as if it were copying some earlier monument from which both are derived. A mould perhaps freer than our example, more three-dimensional, was found at Selinus.[5]

There are replicas of our terracotta in a cupboard of the museum at Zakynthos town and some other examples, all from the same site,[6] of

[1] Blinkenberg, *La Chronique du Temple Lindien*, 1912, p. 33, No. 26 (Mr. Barnett's reference).

[2] Beazley, *Lewis House Gems*, p. 2, pl. 1, No. 5.

[3] *Olympia*, Vol. IV, No. 217. Cf. also a Cretan bronze, *Museo Italiano* Pl. XI.

[4] Kinch, *Vroulia*, fig. 73 (pointed out to me by Mr. Payne).

[5] *Mon. Ant.* xxxiii, p. 94, fig. 20. Can there be any connection between terracottas and coins? Did one perhaps offer a terracotta drachma? (Professor Myres' suggestion.) That some kind of drachma was dedicated at Perachora is proved by a new inscription. Cf. also the bronze 'drachma' found at Anthedon (*Artemis Orthia* p. 393). Note a mould in the Ashmolean Museum from Tarentum, said to be for making cakes, a dolphin above waves. This is a coin-type of Tarentum and also of Zakynthos.

[6] Ἐφημερὶς Ἑβδομάς, Oct. 19th, 1891. *A.M.* 1891, p. 360.

which I reproduce two. The first (fig. 2) also represents a subject which appears as a coin type, a flying Pegasos.[1] He again is rather spare and we have no doubt in placing him not late in the seventh century.

The second (fig. 3) [2] shews a centaur with a branch in his right hand, the end of which appears below his rather stick-like body. His left hand stretches forward. His features are harsh and once they were well-defined. We may place him early in the seventh century.[3] With these two other examples before us it is probable that the cow and calf is also seventh century.

Other finds near the altar cover the period from the sixth century to Roman times. There was also an obsidian knife-blade (pl. 40*b*, no. 9).

It is high time to pass on to the headland [4] where we picked up the

Fig. 2.—Clay Disc from Kalogeros, Zakynthos. Scale 4 : 5.

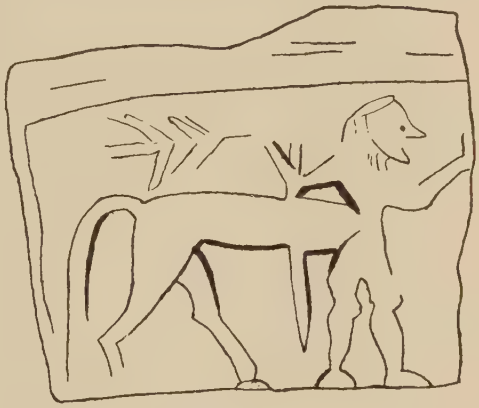


Fig. 3.—Clay Plaque from Kalogeros, Zakynthos. Scale 4 : 5.

neck of a stirrup vase,[5] which seems to be as early as L.M. III B (pl. 39, nos. 9, 10) and also a Mycenaean kylix stem. These were found beside a ruined wall which cuts off the headland at B. There is a nice spring (at C in pl. 39) from which I drank late in June.

The path going East to the shore from the Southern end of the motor road at Basiliko leads almost straight to this site. A little jetty (D in pl. 39) which has been built on the North side is said to have been used in connection with the quarries.

Further North along the shore, East of the School, there is a strip of

[1] In a private collection at Zante but almost certainly with the same provenience. Cf. *Artemis Orthia*, p. 256 and fig. 118*b*.

[2] The inscription on this plaque (not shewn in the drawing) is bogus.

[3] Cf. *Argive Heraeum*, II, pl. xlix, no. 8*a* for a centaur on a similar rectangular plaque.

[4] Pl. 39, 1.

[5] Most of the sherds mentioned in this paper are in the collection of the British School at Athens.

sand, another spring above it, and tombs, made of four stone slabs [1] among which were two obsidian blades, pl. 40*b*, 7, 8. The small geometric bronze

Fig. 4.—Two Bronze Figurines from Zakynthos.
a–b. Scale 1 : 1, 2 : 1. *c*. Scale 1 : 1.

figurines which I here publish (fig. 4, *a*, *b*, *c*) were said to have been found in the soil just East of a house near the School, beside a tomb which was

[1] I should like to call these 'slab-graves.'

broken up for building purposes. In the tomb itself only pottery was found, none of which has been preserved. Five figurines were said to have been found, of which I secured two for the National Museum: the small short-legged men stand unsteadily on sloping feet and hold out their arms, perhaps to drive chariots. They are cast, but it is clear in the photographs that they were then hammered and the nicks in their 'fore-and-aft' helmets (their sole costume) were added after casting. Their only feature seems to be one eye between the pair of them; the excrescences over their ears are probably part of the helmets and the rest of their faces are bird-like.

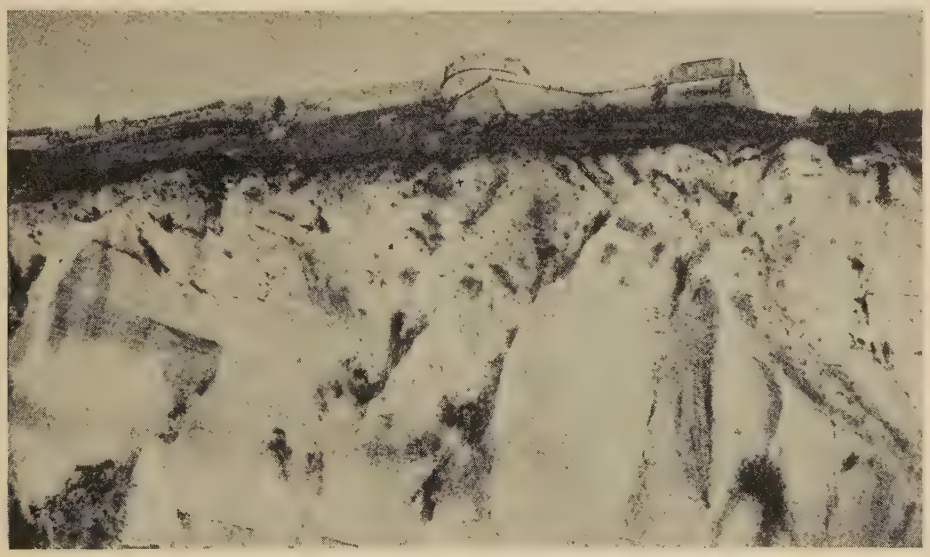


Fig. 5.—The Castle, Zakynthos.

The nearest parallel is the charioteer at Olympia, though his nodding plume shews that orientalism has set in, whereas these little men are still stark enough. Certainly they seem a long way from the time when all the interest has centred in the face, and necks grew long.[1] In their general sturdiness they resemble a good many of the Olympia figures, though they are neater.[2] They carry us well back into the eighth century.[3]

About one mile North of the School, on the path to H. Epistolikos, West of the road, are three tombs, probably Roman.

I have no doubt that the Hellenic town of Zakynthos was on the site of the castle. There is good black glaze near the cross in fig. 5, which

[1] *Fouilles de Delphes*, V, pl. 1, No. 7. [2] Athens Nat. Mus., 6098, 6110.
[3] Kunze, 'Zu den Anfangen der Griechischen Plastik,' *A.M.* 1930, pp. 140 ff.

marks a disintegrating house, on the South side. Below the N.W. bastion there was sixth-century pottery. Further round towards the ravine there was Roman glass and a Roman-looking bath house. Across the ravine, just above the high-road leading to Banato, there were huge stones as from a temple, and the bases of big black-glaze vases. One is tempted to think of the Apollo temple mentioned by Plutarch [1] and figured on the coins.

On the right-hand side of the same road, a little further on, I was shewn a very rough inscription, Τιμησίλας, (fig. 6), on a stone which was said to have been covering a grave. I also saw a plate with an acanthos centre, said to have been found in the grave. This appears to be the first example of this name in its Doric form. Bechtel records Τιμησίλεως [2]

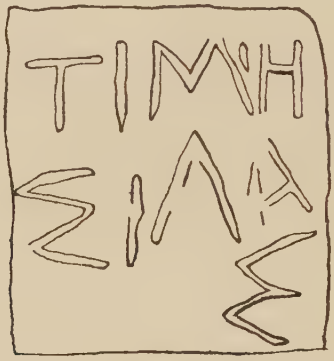


Fig. 6.—Inscription from Zakynthos. Scale 1 : 10.

from Sinope. I saw marble blocks from a ceiling in the dip between the hill above Langopeda and Palaikastro.

Pl. 39, no. 11 is a Mycenaean ewer found near Halikais. When digging a well on the property of Eleos on the road from Katastari to the sea a peasant came upon an old well full of pottery about four spans down. Some of the masonry is incorporated in the new building, which is still in use. The well sometimes runs dry in summer, but I have not yet been able to investigate the masonry myself.

Pl. 39, nos. 1–3, 5 and 8 were collected by me round the mouth of the well. Nos. 4 and 7 are said to have been found to the South-West of the house by the well, one metre down. No. 7 is said to have contained a lump of lead. The following shapes can be identified: krater (pl. 39, no. 1); amphora neck (no. 2); small kylix stem (no. 3); foot of a high cup (no. 4); horizontal handle of a skyphos (no. 5); krater feet (nos. 7, 8).

[1] Plut. *Dion* 23. [2] Cf. the form Κριτόλαος from Bougiato, Riemann, *op. cit.* p. 13, no. 6.

Our fig. 7 shews part of the inside of a built tholos tomb on the South-East side of the hill of Akroterion near Halikais.[1] The diameter is 6 metres and the depth at present 2·5 metres. Enough of the masonry remains to show that it was lined, but the proprietor has picked out most of the facing. He says that the middle of the tomb was not disturbed. Human bones and Mycenaean pottery are still lying about. There is another site of some sort above, as I found the object shown in pl. 39, no. 6 below the South end of the summit. Mr. Marinatos has pointed

Fig. 7.—Tholos Tomb, Zakynthos.

out to me that it is probably the foot of a vase with legs, like many vase-legs which he found at Oikopeda near Kondogenata in Kephallenia. Compare no. 52 from Kephallenia in Neuchâtel, in the De Bosset collection.

Near Mariais I saw a well-preserved tomb, cut in soft psamitis (chalk) and roofed with five slabs, found in 1926. It is about 2 metres long, and from what I heard red-figure vases may have been found there.

The Mycenaean pottery found in Zakynthos is probably locally made, and it is earlier than most of the vases from Kephallenia. The paint, where it survives, is bright and I saw no signs of the patterns popular in Kephallenia and in later Ithaka. Two figured scraps are L.M. III B.

[1] *I.e.* the Salt-pans.

An early connection with Sicily has already been noted (p. 214). The coins clearly shew a link with the Achaean colony of Kroton, and by one tradition Zakynthos itself was Achaean.[1] The coins need not be earlier than the fifth century B.C., though the simple form of the Tripod Lebes without the lower and upper decks elsewhere in fashion, is an archaising feature.[2]

One need not attribute the amphorae on early Zakynthian coins to any special cult of Dionysos.[3] They may appropriately commemorate the export of the wine, which is still excellent, or possibly the pot-making industry. The volcanic mud below the castle is still used for the making of pots for exportation. I saw deserted kilns at Gerakini and Akroterion and their débris at Halikais.

2. Kephallenia.

When I saw the prehistoric pottery in the Museum of Argostoli, I wondered if there could be anything more for me to do in the island. However, as all this was from graves I was emboldened to continue. I visited most of the recorded sites on the island, but I have only marked on the map (pl. 38) those which I believe to be new, or about which I can offer fresh information. The others will be found in the sketch map, fig. 8.

There are sherds which are probably prehistoric on the East and South-East side of the summit of the hill above Poros, but they are rather indeterminate.

There is no doubt that there is an ancient site below the village of Korneli and directly above the high-road from Korone to Baltais. It is badly in need of attention, as Hellenic pithos-burials are emerging from gravel-pits,[4] and bits of large black-glaze vases are lying derelict. Coarse Bronze Age pottery is sticking out of the gravel lower down, and I found one undoubted Minyan handle (not illustrated). Evidently this great trough in the mountain wall was a prehistoric high-road (pl. 40*a*).

At Loutraki, to the South below Skala, there are reported to be Roman baths.[5] The neck of a very large pithos may have given rise to the story, and a pottery is a possible alternative.

[1] Thuc. II, 66.

[2] Grose, *Coins of the FitzWilliam Museum*, No. 6701, may represent a Geometric tripod without animals' feet. Its attribution to Zakynthos is uncertain. A similar coin in the British Museum was found at Mende and the incuse square looks at home in Chalkidike. The absence of feet is not certain, and nos. 1408 and 1409 on Pl. XXXII of the Warren collection suggest that the omission of spandrils may also be accidental. From these coins we may be sure that Grose no. 6700 has spandrils between the legs and not a pellet and crescent as stated.

[3] P. Gardner, *Num. Chron.* 1885, p. 84.

[4] See Holland, *Travels*, Appendix I.

[5] Riemann, *op. cit.* Céphalonie pp. 57–60. Goodison, p. 141.

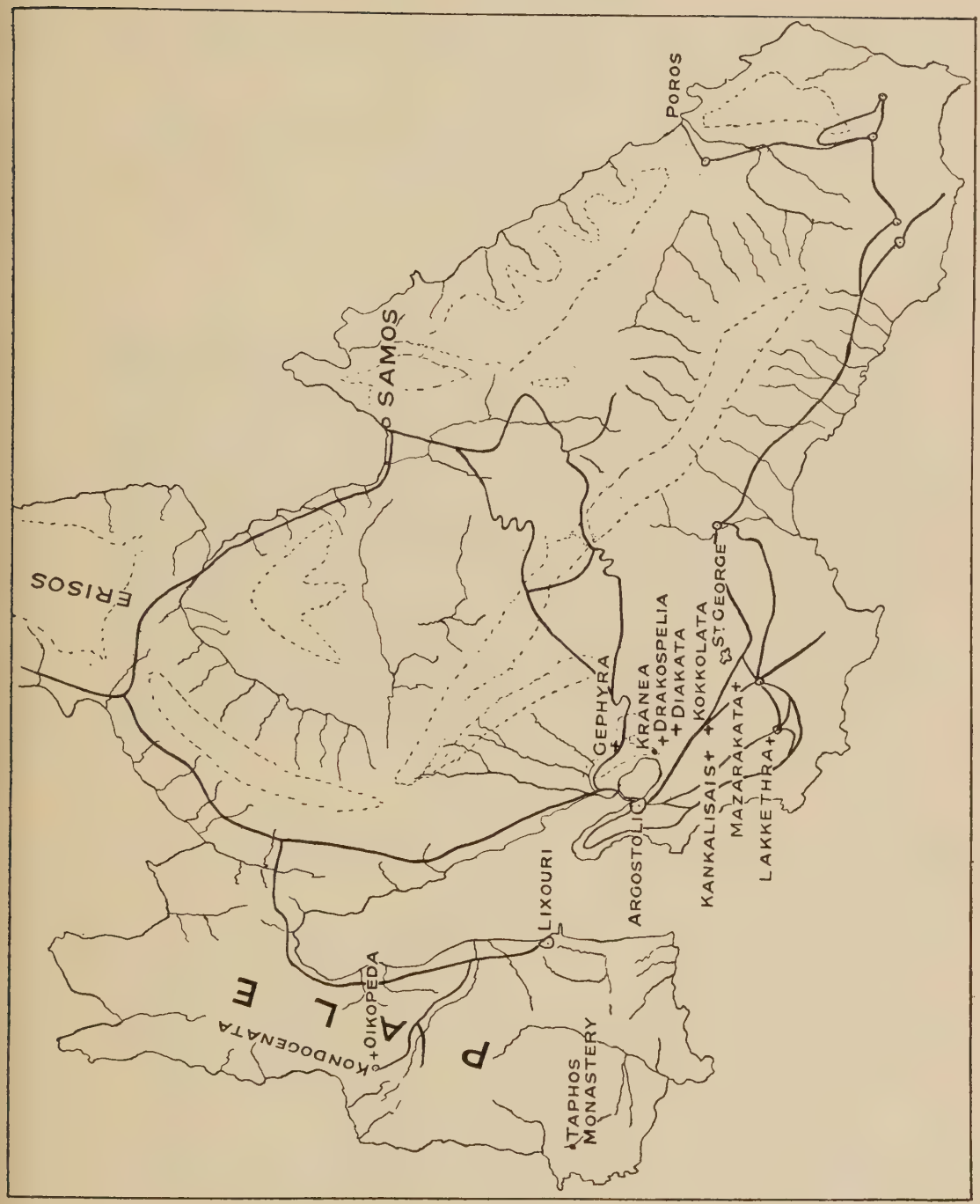


FIG. 8.—KEPHALLENIA. MYCENAEAN SITES MARKED +.

At the top of the East bank above the beach there was an obsidian factory (pl. 40*b*, nos. 1–6). No. 1 is a core and there were many chips. This is a rather interesting find in a flint country.

Coming to Central and West Kephallenia, where the great bulk of the pottery in the graves was found, Kavvadias mentions a pre-Mycenaean cemetery in slab-graves [1] at Kangkalisais. The contents of these appear to be the Minyan [2] kantharoi labelled in the Museum 'Kokkolata-Meningata,' one of which I am allowed to shew, by kind permission of the Greek Government (pl. 40*c*).

It is interesting to find a definite Minyan period here, as in Leukas. In Astakos there are only isolated sherds, and in Ithaka vases of the Middle Bronze Age are found with Early Bronze Age pottery on Pelikata.

The study of Western Late Bronze Age pottery has made me wish to add a class to Mr. Forsdyke's L.M. III B. and call it L.M. III C. He suggests [3] that the zigzags and group of semicircles, which are so widely spread, may be of Central European origin. It is, on the other hand, possible that they are evolved from vases like the sherds in his fig. 289, where they appear as subsidiary motives. These patterns do not occur as the main decoration at Mycenae, Korakou or Zygouries, which all stopped abruptly, so they are likely to be a later development after the fall of Mycenae.[4]

The characteristic grave of Kephallenia is the cave 'dormitory,' [5] cut in chalk or a chalky rock, which is unique not only in the West but in Greece. The type is long-lived, as something like it appears in the open air at Kampana in classical times.[6]

The pottery from these tombs is largely unpublished,[7] but there are many cases of it at Argostoli and one in Neuchâtel. It strikes one as late, as having declined from the refined, hard-baked clay and bright paint of Mycenae. Moreover, some of the patterns are peculiar to Kephallenia, such as hatched triangles between spirals,[8] and some shapes, as for instance the vases with split feet.[9] The favourite Kephallenian shape is the stirrup-vase, of which we have only two in Ithaka.

Two late vases, one in Neuchâtel and one in Argostoli, are like vases in Ithaka. Two vases of good Mycenaean fabric were found by Kypa-

[1] Kavvadias calls them 'box-graves.'

[2] These bear no resemblance to the vases shewn in Kavvadias Προϊστορικὴ Ἀρχαιολογία p. 354, fig. 336, which they are said to resemble, but they have their counterparts in the F graves at Leukas: *Alt-Ithaka*, Beilage 73.

[3] *B.M. Vases*, I, i, p. xli. [4] See *ibid.* nos. C. 620, A. 957, A. 728.

[5] Kyparisses, Δελτ. 1919, p. 95. Kavvadias, *op. cit.* p. 360, fig. 449.

[6] Πρακτ. 1912, fig. 6, p. 110.

[7] See Note 2 below, and *Rev. Arch.* 37, pp. 128–47.

[8] Δελτ. 1919, fig. 24, no. 1; fig. 25, no. 1. *Rev. Arch.* 37, p. 138, fig. 12. Neuchâtel catalogue, nos. 55, 56, 67.

[9] See p. 219 above, and *J. d. I.* xlvi, p. 267.

risses, and three in an isolated tomb at Gephyra;[1] there are also three in Neuchâtel with disintegrated flowers.[2] These are entirely unlike anything in Ithaka.

A little further evidence on the tombs is supplied by the gems from Mycenaean tombs published by Kavvadias, Πρακτ. 1912, pp. 256, 257. No. 17 is a wheel-cut Mycenaean agate of good workmanship. Most of the others are cut by hand, some of them very roughly (notice particularly Nos. 13 and 15), and suggest geometric motives. Compare No. 12 with Furtwängler, *Gemmen*, iii, p. 60, fig. 43. No. 25 is frankly archaic Greek, a centaur looking back with a branch behind his head. The tombs must,

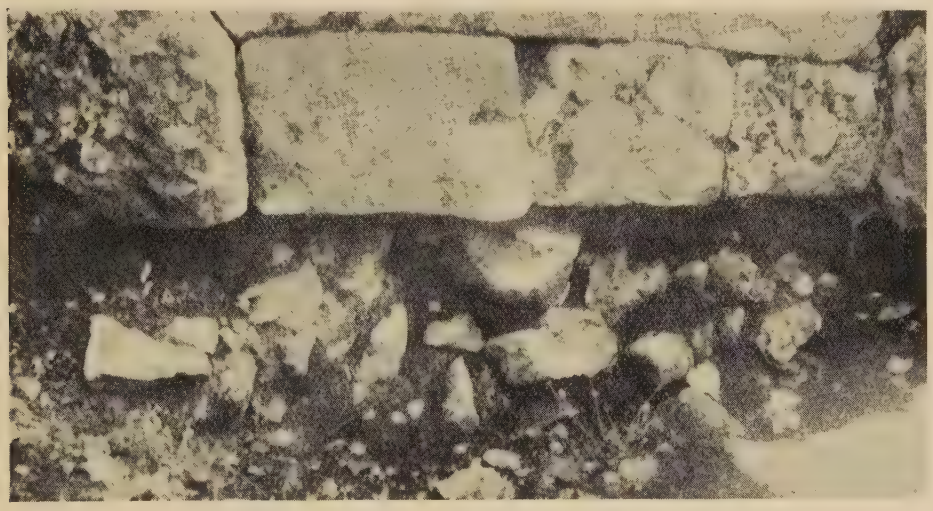


Fig. 9.—Kranea, North Cross-Wall.

therefore, have remained open in the time when these seals were in vogue. Miss Lorimer has pointed out that some of the objects in these tombs are undoubtedly early.[3] At Dendra,[4] at Lakkethra[5] and in tombs in Achaia,[6] and in Kythera[7] some of the offerings are so early that they cannot in any case be contemporary with the pottery, and therefore they do not affect the argument.

Kyparisses[8] domiciled the owners of his tombs on Kranea, but he

[1] Δελτ. 1919, p. 114, figs. 17–20, 29.
[2] Museum Catalogue 65, 65, 2 and 85, badly illustrated *loc. cit.* fig. 20.
[3] Kavvadias, *op. cit.* p. 367, no. 457.
[4] The sword-hilt on Pl. XXII seems incompatible with the date soon after 1400 which is assigned to the pottery in the tomb.
[5] *J.H.S.* 1932, p. 248.
[6] I am much indebted to Mr. Kyparisses for the trouble he took in order to show me the contents of these tombs.
[7] Stais, Δελτ. 1915, p. 192, fig. 1.
[8] Δελτ. 1919, pp. 82–94.

has not given all the evidence. Both his cross-wall (fig. 9), called North cross-wall on our plan (fig. 10), and the gate which it closes, appear to be built on stones, probably foundations, containing Early Bronze Age and Minyan pottery. The dump above it has Mycenaean-looking sherds, probably from stirrup-vases, cups, kraters, and the like. The North cross-wall, which must be later than the gate, is of neat polygonal masonry,[1] of a different character from the South cross-wall, which breaks into, and is therefore later than, a Hellenistic tile-grave. Sections of these walls and of the Acropolis levels are given in fig. 11.

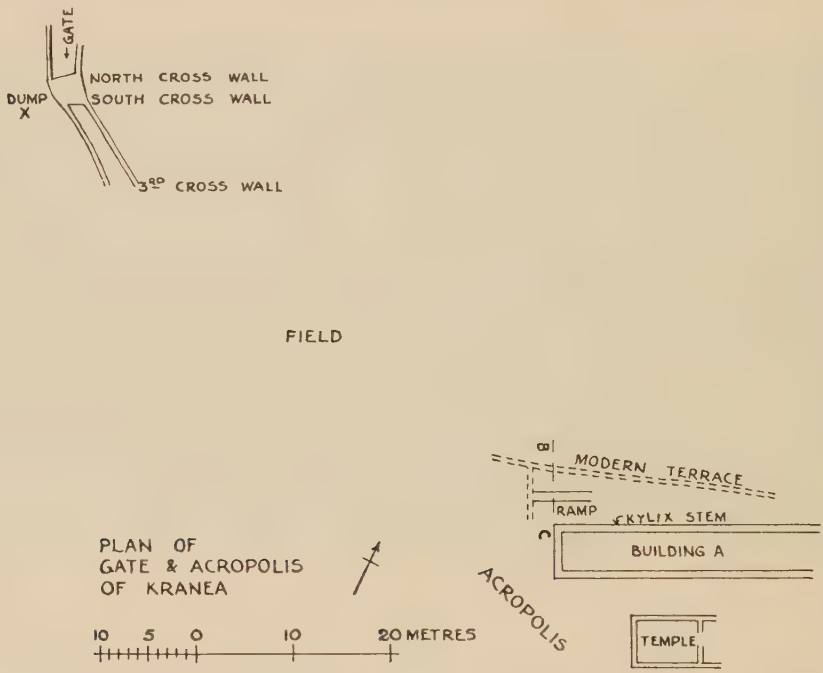


Fig. 10.—Kranea: Plan of the Acropolis.

About 50 metres South-West of the gate is what appears to be the end of a ramp (Pl. 12, 1) leading up to a long building, in the wall of which I found a kylix stem. On the West of this are the foundations of a Hellenic temple in antis. It seems almost inevitable that this was the site of the Megaron, belonging to the Lords of Kephallenia at their most splendid period. The free use of the 'crutch'[2] in the walls of the gate bears out our view that the culture, though apparently Mycenaean in character, was late and degenerate.

[1] Kyparisses, *op. cit.* fig. 7. It is impossible that this should be of Roman date. It may be sixth century.

[2] See fig. 7 (Kyparisses).

A large cave at Gravaris, East of Kranea, contains pottery disintegrating in the mud. One bowl-rim of Arretine type, in good condition, shews that there was Roman pottery in this neighbourhood, if not near the 'Roman' wall.

More red-glaze pottery is to be found in the gravel pits North of the Guest House, and West of the road that leads to the convent of H. Gerasimos.

There are still fragments of bone on the Μέγας Σωρός at the top of Aenos (Pl. 40 *d*). Scraps of pottery also remain, some of which may be Bronze Age, and a line of stones probably marks an altar.

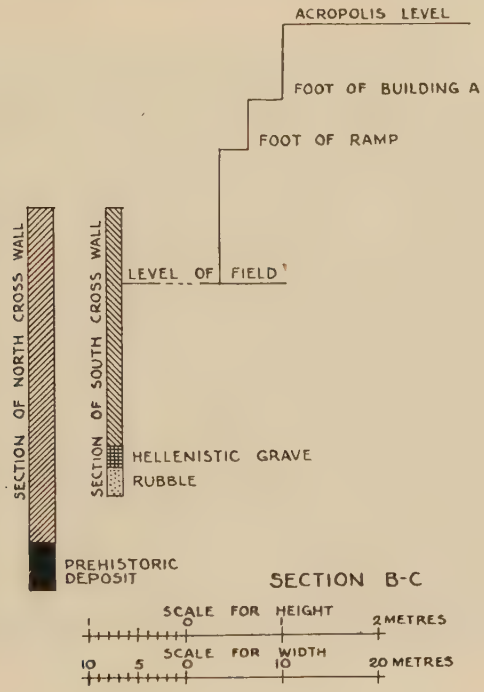


FIG. 11.—KRANEA: THE ACROPOLIS, SECTION.

There is a cave at Kakolangada, near the village of Koulourata, which contains pottery with Early Bronze Age characteristics (fig. 13; Pl. 41, 10–18),[1] resembling the pottery found on Pelikata in Ithaka. There is also a Minyan handle (no. 10).

Kylix stems were found on the West side of the hill, on the opposite side of the road from the cave, below a small Hellenic fort.

On the hillock on the right side of the road before reaching Same, Kavvadias excavated foundations that may be prehistoric. The incurving rim of a pithos *in situ* outside one of them affords a little evidence for this view.

[1] Note the knobs below the rim in no. 11. No. 15 is Corinthian.

I trod on the unrecorded footsteps of Kavvadias again, South of the town of Phiskardo. He had uncovered a massive wall, below which there are many good black-glaze sherds. There are some extremely attractive cave-shelters behind, but I found nothing prehistoric on the surface.

I hope that these notes may be of use to Dr. Marinatos in his exploration of his native island. I have to thank him for his help and counsel on many occasions. I am also much indebted to the kindness of the Curator of the Museum of Argostoli.

I conclude my notes on Kephallenia with a brief examination of the myths concerning Kephalos.

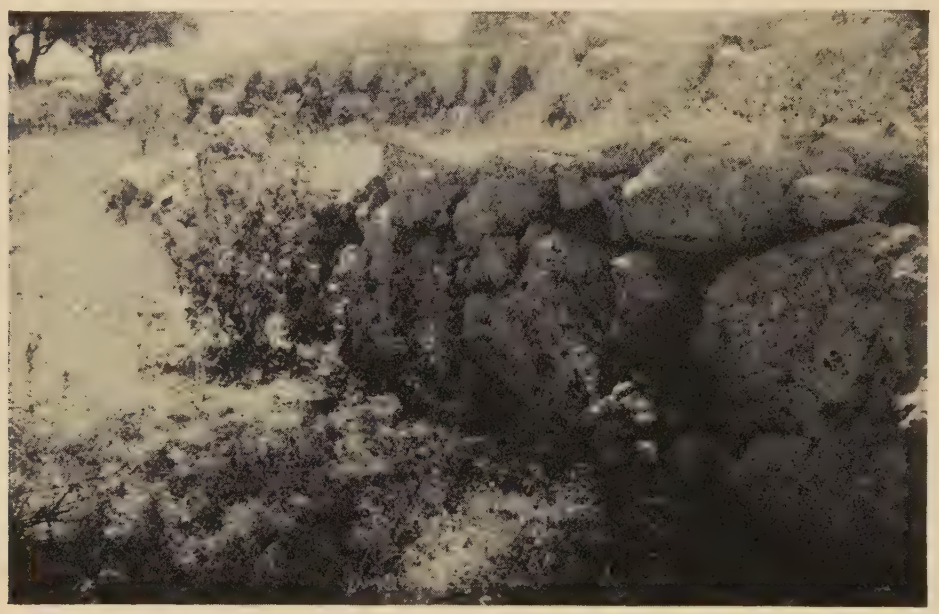


Fig. 12.—Kranea, the Ramp.

Note on Kephalos.

There was a genuine Attic hero Kephalos, connected with the Homeric heroine Prokris,[1] and carried off by Eos. He was a hunter, founder of Thorikos and ancestor of the Kephalidae.[2] He is a familiar figure on red-figure vases, easily confused with Tithonos, but sometimes clearly distinguished by inscription or the presence of his dog.[3] The earliest recorded

[1] *Od.* XI, 321. Hes. *Theog.* 986

[2] Töpfer, *Attische Genealogie*, p. 255.

[3] Stephani, *C. R. Ac. Inscr.* 1872, p. 180, has collected 50 examples. Nos. 13, 42, 16, 28, 39, 44 are certain. The hunter named Tithonos on the Hermitage vase shows that vocation is not here a certain criterion. *Ibid.* Pl. IV.

representation of the rape is that on the throne of Bathycles at Amyclae.[1] An Etruscan mirror [2] seems to antedate the vases, so that the tale did travel westwards early, but probably not from Athens.

It is possible that Kephalos' share in the expedition to the West, and the creation of names like Pterelaos, dated from the expedition of Tolmides [3] in 456–5 B.C. when the four cities joined the Athenian alliance. The earliest mention of Kephallenia is in Herodotos [4] and he also uses the expression 'Ιονίου Κόλπου, the whole linking up Athens, Kephallenia and the *Odyssey*. Perhaps Diodorus exaggerated the completeness of the

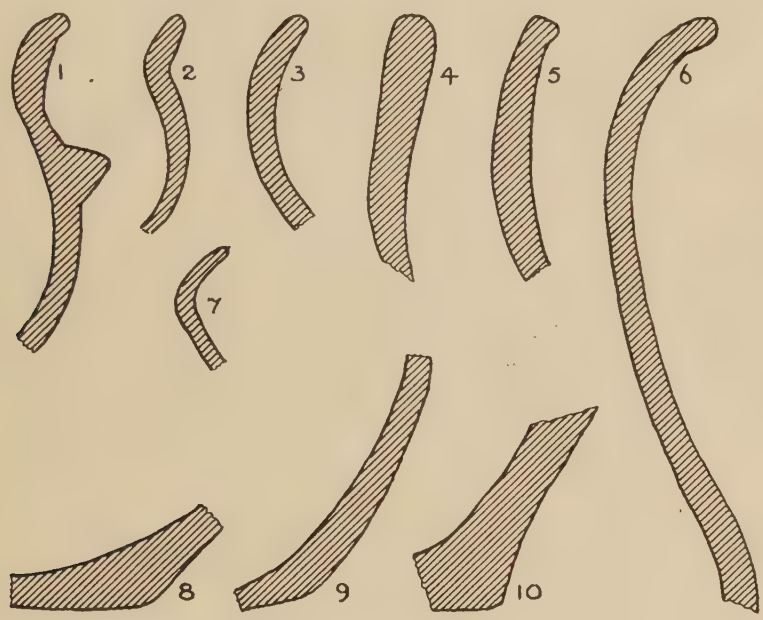


FIG. 13.—KAKOLANGADA, POTTERY SECTIONS. (SCALE 1 : 2.)

alliance, for we hear of Pale subsequently helping Corinth. After the second alliance in 431, the new eponymous hero was enthusiastically received, and all four cities note it on their coins. Kranea, Pale and Same imitate Parthenon types, Kephalos himself, his dog and club also appear.[5] Athens on her side set Kephalos in the East pediment of the Parthenon, on the Stoa Basilike (409 B.C.) and, if we may believe Furtwängler's restoration, on a late fifth-century building at Delos.

The School of Hellas had unrivalled opportunities for emphasising,

[1] Paus. III, 18, 12.
[2] Gerhard, *Etruskische Spiegel*, Pl. CCCLXIII.
[3] Dio, XI, 84.
[4] IX, 28; VI, 127.
[5] *B.M. Coins of the Peloponnese*, Pl. XVII, 10, etc. 21. Pl. XVIII, 4, 9, 11. That the Parthenon figure is also Kephalos is doubtful.

altering or manufacturing myth to suit her purpose, but she has not been successful with Kephalos. Professor Myres leaves him out of the genealogies, and if we try to insert him we find that he married his aunt Prokris [1]

EXCAVATIONS IN KEPHALLENIA.

Site.	Date.	Excavator.	References.
Mazarakata	1810–14	De Bosset	*Rev. Arch.* 37, p. 128; Catalogue of the Musée d'Histoire, Neuchâtel.
	1889	Kavvadias	—
	1908	,,	Πρακτ. 1912, p. 249.
	1909	,,	*C.R. Ac. Inscr.* 1909, p. 387; 1911, p. 6. Kavvadias, Προϊστορικὴ Ἀρχαιολογία p. 355.
Kokkolata	1908	Kavvadias	—
	1911	Kyparisses, Philadelpheus	Πρακτ. 1912, p. 111.
Kangkalisais or Kokkolata-Meningata	1909	Kavvadias	Προϊστ. Ἀρχ. p. 371; Πρακτ. 1912, p. 247.
	1911	Kyparisses, Philadelpheus	Πρακτ. 1912, p. 110.
Lakkethra	1911	Kyparisses, Philadelpheus	Πρακτ. 1912, p. 100.
	1932	Marinatos	*J.d.I.* 47, p. 148.
Diakata	1909	Kavvadias	*C.R.Ac.Inscr.* 1911, p. 7; Προϊστ. Ἀρχ. p. 372.
	1911	Kyparisses, Philadelpheus	Πρακτ. 1912, p. 117.
	1915	Kyparisses	Δελτ. 1915, Παράρτημα, p. 59; 1919, p. 95.
Kranea	1915	Kyparisses	Δελτ. 1919, p. 83.
Oikopeda	—	Marinatos	Δελτ. 1920–21, Παράρτημα, p. 173.
Same	1883	Kavvadias	Πρακτ. 1889, p. 17; *C.R.Ac.Inscr.* 1909, p. 382.
	1889	,,	Πρακτ. 1912, p. 247.

I have only included sites which I was able to locate, and I have omitted reports which only give short summaries.

in the generation of 1330, fought on the side of Amphitryon [2] of the generation of 1230, against Pterelaos [3] of the generation of 1160, and against

[1] Apoll. I, 9, 4. [2] Apoll. II, 4, 7. [3] Apoll. II, 4, 5.

Pterelaos' sons of the generation of 1130. Eustathios [1] tells us that one of the latter was Ithakos [2] who is mentioned in the *Odyssey* as having made the Tykte Krene in former days (*i.e.* before 1174 B.C.). Clearly Strabo was right, ταῦτα δ' οὐκ ὁμηρικά. On the other hand, Amphitryon's expedition against the Taphians and the connection of Mycenae with Taphos are ancient.[3]

It may seem idle to speculate what sort of coinage these islands used before the expedition of Tolmides (the *terminus post quem* for the coinage under Athenian influence, though 431, the later date suggested, seems more probable). I have seen it stated that all the islands were entirely under the sway of Corinth.[4] Of Ithaka this may well be true, remembering Corinthian influence at Polis and Pisaetos, and we may just notice that three early coins at Polis are Corinthian in type. Of Kranea we know that it is not true. During the sixth century she had a very individualistic coinage in which we can trace no foreign influence.

3. Ithaka.

The antiquities of Ithaka have been omitted, not because they have not been studied, but because I must not anticipate the Ithaka publication. From the preliminary reports [5] the importance and wealth of Ithaka from the Early Bronze Age to Roman times have been sufficiently indicated. Note particularly the richness of the shrines at Pisaetos and Polis, as shewn by the quantities of geometric and Proto-Corinthian pottery at the one, geometric tripods and Corinthian pottery at the other.

4. Leukas.

In Leukas the explorations of Professor Dörpfeld absolved me from much field-work. I have to thank him for hospitality on repeated visits and for his generosity in placing his notebooks at my disposal.

Professor Myres has reproached Professor Dörpfeld with putting his Achaeans two whole periods too early,[6] but they did not use homogeneous pottery. The pottery and other objects from the 'R' graves are Early Bronze Age. The shapes of three vases of the 'S' graves and their fabric resemble transition forms between the Early and Middle Bronze Age,[7]

[1] Eustathios ad Hom. 1817, 43. [2] *Od.* XVII, 207.

[3] Herod. V, 59. Hes. *Aspis, ad init.*

[4] Partsch affirms it of Pale, on the strength of a report of Biedermann of Corinthian coins countermarked with the Pale monogram (p. 40), but see what he says of another report by the same authority on p. 81.

[5] *I.L.N.* Dec. 6th, 1930; Feb. 20th, 1932; Jan. 14th, 1933. *J.H.S.* 1931, p. 195; 1932, p. 245.

[6] *A.J.* viii, p. 540, and *Who were the Greeks?*, p. 397.

[7] Cf. *I.L.N.* Dec. 6th, 1930, fig. 2, bottom left-hand corner. *Alt-Ithaka*, Beilage 7², 4, 5, 7.

found by Mr. Heurtley on Pelikata. The remainder of the contents of the 'S' graves are undoubtedly Middle Bronze Age. Professor Dörpfeld, relying on fabric alone, has failed to detect the difference in shape.

We are tempted to suppose that his two building periods may also be equated to the Early and Middle Bronze Age.

There is very little Mycenaean pottery of a good period in the Museum; in fact, I think even the solitary 'kylix stem'[1] from Nidri is Hellenic. It is a base indistinguishable in paint and shape from lekythos bases found by me at Kekropoula (one is now at Nidri). It has a neat, regular bevel which is quite new in Mycenaean pottery; contrast the indeterminate swellings on Ithakan kylikes. Some of the Choirospilia Mycenaean, however, notably a kylix stem,[2] is of unimpeachable quality; but even so, after exhaustive exploration, there is very little Mycenaean in the island, less than in any of the other large islands, even Zakynthos which is still unexcavated.

We may note that the legends declare that Doulichion was colonised from Elis by Meges. It is a strange coincidence that to-day there is little Mycenaean pottery reported from Elis,[3] while there are long lists of sites or tombs from Achaia and Messenia and at least three from Triphylia.

What Dörpfeld has under-estimated is the amount of Neolithic pottery.[4] I believe that Mr. Blegen classifies some of the so-called matt-painted pottery from Choirospilia as Neolithic,[5] and since seeing the pottery at Astakos I think it extremely likely. I believe, also, that there was repeated colonisation of Italy from these regions.[6]

5. Meganisi.

Meganisi (Pl. 41) is now in the Nome of Leukas, so this is a convenient opportunity for a visit. The four large islands can be reached by steamer, but henceforward we shall employ a motor-boat.

Over the bay of Spelaion lies the village of Spartochori. Just below

[1] *Op. cit.* Beilage 59 *b*, No. 1. [2] *Op cit.* Beilage 89 *b*, centre.

[3] Olympia: Weege, *A.M.* 1911, p. 176, Abb. 20.

To the one sherd hitherto reported from Olympia I should like to add the greater part of an Ithakan bevelled kylix which has hitherto escaped detection in the workroom at Olympia. We should welcome a revision of the pottery from 'Building V.'

[4] *Op. cit.* Beilage 57 *b*. These sherds are not sacral Achaean (*op. cit.* Vol. I, p. 169), but eneolithic; see also Beil. 56 *b*. Cf. our Plate 41, nos. 4–9.

[5] *Op. cit.* Beil. 89.

[6] The only Italian painted Neolithic pottery I have seen is in the Bari Museum. The three-colour ware there closely resembles some of the Leukas and Astakos sherds; one might describe it as a three-colour ware like Thessalian A in quality. In Rome there are sub-Mycenaean sherds from Gargano that resemble pottery in Kephallenia and Ithaka in quality and pattern: compare *Mon. Ant.* xix, Pl. IV, no. 9, with a sherd in Ithaka, and no. 11 with jugs in Argostoli.

the village a steep goat-track leads to a cave in the limestone cliffs that crown the hill. The cave has a by-pass at the entrance, down which one must crawl through mud, and then it descends by caverns and winding passages. A cursory examination took two hours, during which we filled a basket with surface pottery.

Near the entrance were Hellenistic terracotta plaques shewing nymphs, satyrs, and a krater. Lower down there were big black-glaze sherds and human bones. At the end of the cave was pottery, which was late Neolithic

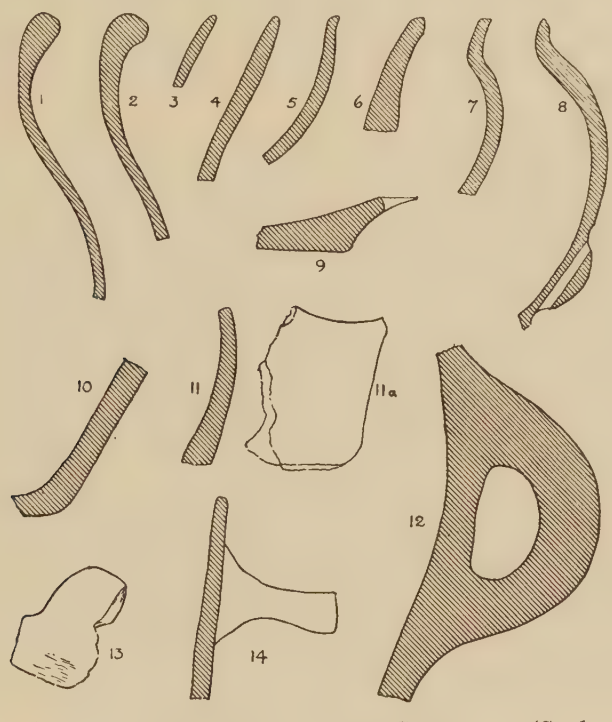


FIG. 14.—MEGANISI, POTTERY SECTIONS. (Scale 1 : 2.)

or Early Bronze Age (fig. 14). The incised sherds (Pl. 41, nos. 4–9) closely resemble what Professor Dörpfeld considers 'sacral Achaean' pottery;[1] it is more probably eneolithic. Nos. 5 and 9 belong to a bowl with subcutaneous lugs.[2]

Still more interesting are three sherds of painted pottery.

Pl. 41, no. 3 is part of a cup, with a rolled handle below the rim. There is a straggling lattice of black paint round the handle on a nondescript ground, again reminding us of finds at Armenochori.

[1] *Alt-Ithaka*, Beilage 57 *b*, as Beilage 56 *b* from Nidri, and p. 169.

[2] Cf. a complete bowl in the lowest layer at Armenochori, *B.S.A.* Report 1930–31, p. 8.

No. 2 is in bad condition. Bands of lines meet and cross, probably in black paint on a white ground. The shape is uncertain, but the general character reminds one of Dimini pottery.

No. 1. Brown paint was laid on a smooth buff ground, and the whole then polished. This is the technique of Dimini pottery, though our handle does not belong to any shape hitherto found in that fabric. In general aspect and in the clay it is like our Astakos painted pottery.

Thus the connections of the eneolithic pottery here seem to be with the North and East. The richness of the surface deposit makes the cave an attractive one, though excavation in it would be uncomfortable.

A complete Roman flagon, found in a crevice during our passage, is now in the museum at Nidri.[1]

South of the village of Spartochori there were several fields covered with fragments of Late Bronze Age pithoi, and among them was an unmistakable Mycenaean kylix foot, part of the neck of a jug, krater-bases, etc. A few trial trenches in this site would yield very interesting results.

I found a seventh-century sherd above the South-East corner of Limena Batheos. There are extensive ruins here among which I saw a classical foundation. On the top of the hill were large lumps of haematite among nondescript buildings and broken pottery that had been subjected to a great heat.

The frescoes of H. Konstantinos in this neighbourhood await the attention of a student of Byzantine art.

6. Arkoudi and Atokos.

To Professor Dörpfeld's account of Arkoudi I should like to add a fairly large wall running East and West between the two highest summits.[2] The pottery in its neighbourhood seemed all modern.

There are acres of vineyards, and various other fruits are grown. The scrub is about 12 feet high over the uncultivated part of the island.

A visit to Atokos was interesting but unproductive. It is a poor island growing a little corn for the one shepherd family domiciled upon it.

A Byzantine coin, said to have been found by the landing-place, is perhaps worth recording.

There are foundations of a fairly large building on the higher ground to the South-West of the corn-fields. Here were small bits of Haematite,[3] some Hellenistic pottery and a skeleton.

[1] Cf. Blegen, *Zygouries*, No. 323, fig. 175, possibly dated to the middle of the fourth century A.D.

[2] Mr. Tait drew my attention to this wall.

[3] Mr. O. Davies' identification.

7. Kalamos.

The beauties of Kalamos struck me all unawares, for the island has hardly been mentioned by other writers. Leake repeats some information from the Protogeros of Kalamos [1] and Meliarakes [2] gives a few facts. It has a most delightful pine wood on the South-East corner, which is traversed by a good road leading from the main village Kalamos to Episkopi. This passes through a Byzantine monastery now called Kastro. At the point of Episkopi I found black-glaze pottery.

The hillside above is littered with Hellenic pottery, from H. Mina, just below the crags, all the way to the road. The church itself is built

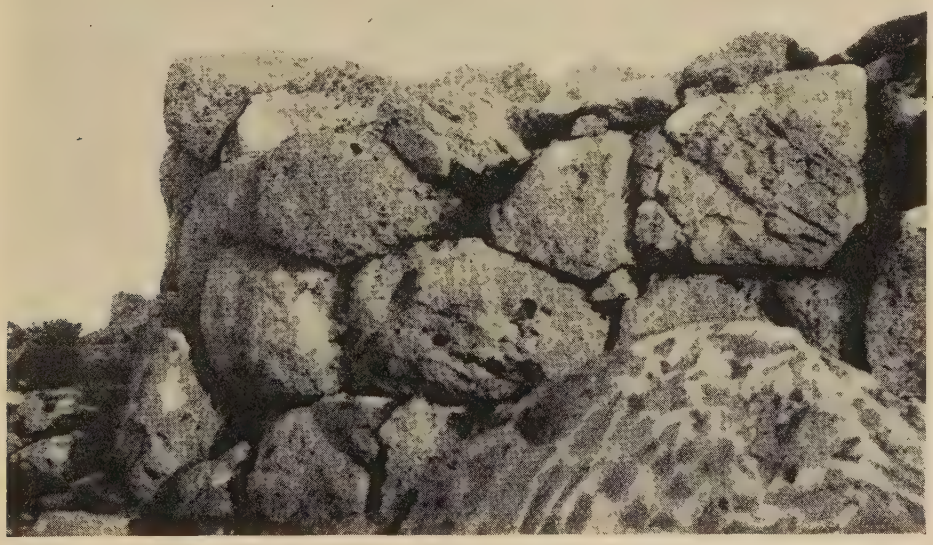


Fig. 15.—Round Tower at Xylokastro, Kalamos.

of re-used polygonal blocks. Remains of fortification walls and houses of polygonal masonry are to be found above and below it. There must have been a town of no small importance here.[3]

On the very summit of the hill at the North-Eastern end of the island is a neat Hellenic fort,[4] surrounded by precipices. This is also of polygonal masonry and contained a small quantity of good black-glaze pottery. There was so little pottery of any sort that the occupation may not have been a very long one.

[1] Leake, *Travels in Northern Greece*, Vol. III, pp. 29 ff.
[2] Meliarakes, *Kephallenia and Ithaka*, pp. 159 ff.
[3] Perhaps Meliarakes' πόλισμα, see pp. 12, 2.
[4] Mentioned by the Protogeros.

The Chart [1] gives the height as 2225 feet, and it must be one of the most inaccessible forts in Greece.[2] Most of the perimeter of the wall remains, in some places to a height of 2 metres on the outside. The masonry is rather rough, but this may be due to weathering. The fort has three square towers, a gateway and a round tower in good preservation (fig. 15). Inside is a cistern and several foundations. The building occupies the whole crest of the hill and is about 100 metres by 40 metres.

There is a small square tower on the ridge towards the Zygos at the head of the ravine leading from Kalamos to Xylokastro. Helleniko is another square tower below the Zygos on the Kalamos side above the path to Episkopi where the vines stop.

The mud cliffs West of Kalamos end near a windmill [3] on a rock. At the top of the cliff half an empty slab grave [4] is visible; immediately above it were pithos fragments. On the other side of the small bay there was polished hand-made pottery among the stones of a wall, and levigated sherds which Mr. Heurtley thinks may be Neolithic, belonging to a vase with sharply everted neck.

Kephali in the West end of the island presents the curious spectacle of a village 500 steep feet above the necessaries of life, such as water, charcoal and olives. Some families had abandoned their homes and camped gipsy fashion by the sea. Our host had built two houses, but even that had its disadvantages, for his wife insisted on living up the hill.

Kastos is a long low stony ridge. I was shewn a Roman coin said to be from the surface at Lakulia, the deserted village on the Admiralty Chart. The modern village is further South. Below the crypt of the church is some brickwork that may be ancient.[5]

8. The Archipelago.

We now travel South among the smaller islands off the coast of Akarnania, and Aetolia (Pl. 38). The mapping of this district is still imperfect. The Austrian staff map writes Kurtsolari, and in brackets Echinades, beside the Makri group, and omits many of the islands. The Admiralty Chart puts Echinades beside the Dragonara group: it gives all the islands but one, but the names are curious. Particularly trying is the name

[1] Leake's Protegeros places Muli (*i.e.* Kalamos) and Episkopi West and East of the hill, instead of North and South: see p. 12, 1.

[2] It also gives the name as Vuni, an obvious misunderstanding, and places 'Xilo Castro' and tower in the middle of the island.

In von Marées' map of Kalamos I suspect that the wall marked West of the village of Kalamos has its origin in this Chart error, and that it represents another migration of Xylokastro. *Karten von Leukas*, 1907, no. 1.

[3] Hence the name Muli in Leake, *op. cit.*

[4] Measurement 0·50 by 0·30 metre. Depth into the cliff 0·45 metre.

[5] Since I wrote this a Christian ossuary has been found close to it.

Dragomesti Bay, taken from a village six miles inland, for the Bay of Astakos. I could not find my sites on the Chart's hill shading, nor reconcile the Austrian coast-line, so finally most of the hills were omitted altogether.

The names I have used are the names used by the shepherds to-day. Stamoda appears to be obsolete, and most of the other differences in the Chart names are acoustic errors.

The lettering of the 1 : 500,000 map by C. Grigouras was evidently disturbed. Besides a general move on of island names, there has been degutturalisation in Ehinades and Aheloos and a strange aspiration in the name 'Vromonishos.' Other variants of this termination are: -nishon, -honishia, -nishi, -nishia, -nisson.

Fig. 16.—Island of Sophia.

The dreaded South wind prevented me from visiting Vromona, which has a dangerous coast, but I interviewed its proprietor in Makri. I was able to visit all the other inhabited islands, Dragonara, Karlonisi, Provati, Pondiko, Petala and Oxia. Of the uninhabited islands I had to omit Modi and its satellites, but I made some kind of examination of the rest.

There are signs of cultivation on Dragonara, Provati, Pondiko and Petala, but it can never have been extensive. For the most part there is very little soil in the crevices of the grey rocks, though rosy milkwort bushes and an occasional madonna lily make the islands rather beautiful. The rearing of sheep and goats is the only real industry and all the islands are pressed into service, if only as a sanatorium like Sophia (fig. 16). Petala has fifteen head of cattle living in a wild state.

Petala is the only island with a good natural well. The water in the cisterns of Oxia was clear and cold, in those of the other inhabited islands it was bright red.

Dragonara has a much larger acreage in comparison with the islands round it than one would imagine from a cursory glance at the Chart, owing to its varying contours. Caves on the South looked attractive, but produced nothing of interest.

Provati had a good many sherds on the shore facing Astakos and there was one piece of black glaze the size of a sixpence. A very unpromising cave on its South-East side produced the bases of two prehistoric vessels, which since the Astakos excavations I believe to be Neolithic.

Petala has great rolling downs covered with scrub and shewing little trace of cultivation except just round the houses. There was a little

Fig. 17.—Mouth of the Acheloös, from Oxia.

terracing above the well on the East promontory, but the sherds below it had no signs of antiquity. They probably belonged to Leake's [1] pirates or anti-pirates.

The serrated contour of Oxia dominates every horizon, and I was led by faint tracks over its pinnacles and along its precipitous cliffs. A fantastic island! Though so near the mouth of the Acheloos (fig. 17), it is surrounded by deep water, much frequented by fishermen. The bed-sitting-room of the lighthouse-keeper was stacked with half-dried fish that looked like cod, and his terrace was wreathed with drying octopods.

This seems the place for a definition of the term Echinades. Strabo contradicts himself; islands within four miles of the Acheloos,[2] and yet between Krithote and Astakos,[3] *i.e.* starting on the North with Kalogeros.

[1] Leake, *op. cit.* IV, p. 2. [2] Strabo, 458. [3] *Ibid.* 459.

Homer,[1] Herodotus [2] and Thucydides [3] seem safer guides. Homer says that they are sacred islands over the sea opposite Elis; Herodotus places them at the mouth of the Acheloos and says that they are rapidly becoming

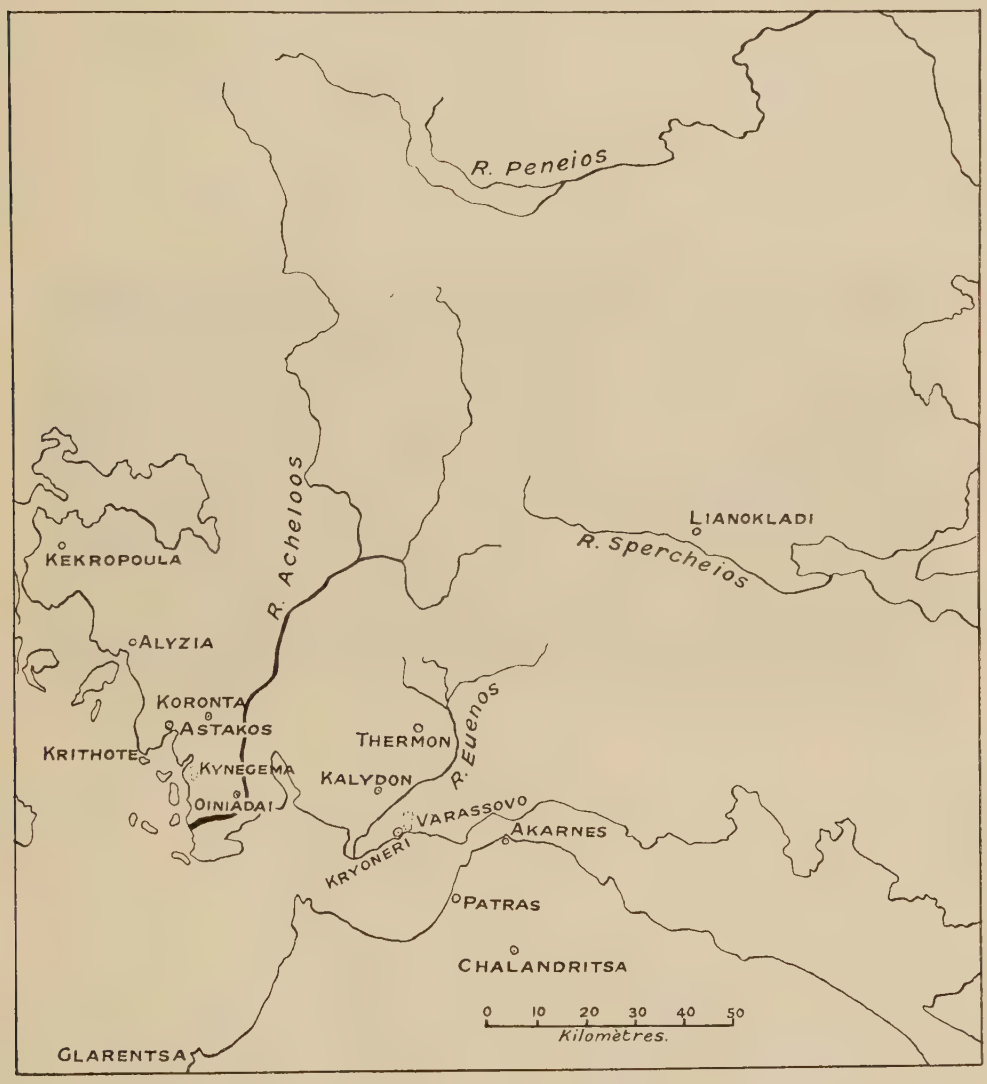


FIG. 18.—MAP TO ILLUSTRATE SOME SITES ON THE MAINLAND.

mainland; Thucydides emphasises their alluvial character and adds that they are opposite Oeniadae, whose situation has been certainly identified with Trikardokastro, near the Acheloos. This would make the hills

[1] *Il.* II, 626. [2] II, 10. [3] II, 102–3.

marked Kunevima [1] on the Admiralty Chart probably Echinades, the island of Petala, Makri, Vromona, all the islands South of Petala and the Kurtsolari.

9. Aetolia and Akarnania.

It may be useful to give a few observations on the archaeology of the adjacent mainland and to notice the position of sites with regard to the principal rivers (fig. 18).[2]

It has not yet been clearly stated that the Southern influence in the Mycenaean hybrids at Thermon [3] goes back before 1400. Some such influence lies behind the patterns of some vases from Achaia,[4] though

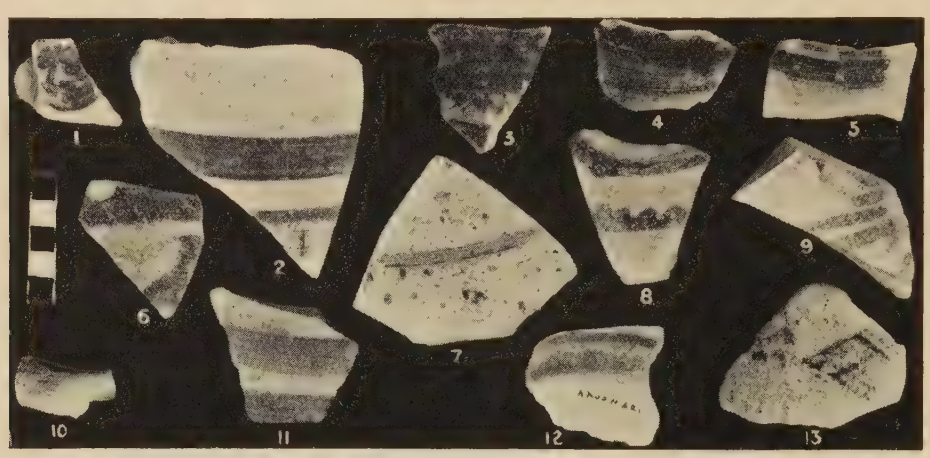


Fig. 19.—Neolithic and Mycenaean Sherds from Kryoneri (No. 7 from Kekropoula).

the general impression of the vases in the Patras Museum is very late indeed. Still, I have seen imported L.M. I. sherds from Akarnes [5] in

[1] This name does not look right and Professor Myres suggests κυνήγημα from his knowledge of naval ways. The shooting is good round these marshes.

[2] See Myres, *Who were the Greeks?*, p. 151.

[3] Rhomaios, Δελτ. 1915, pp. 267, 269.

[4] From Goumenitsa; Kyparisses, Δελτ. 1922–5, Παράρτημα pp. 14–19. Goumenitsa is not in the district of Kynouria as stated: the neighbourhood is called Kalavryta. I do not know why fig. 2 has been repeated. Professor Myres suggests that these Mycenaean tombs in Kalavryta may be taken as confirmation of Bury's explanation of ἂν Ἑλλάδα (*J.H.S.* xv, p. 217); at any rate these tombs, which are very numerous (at Chalandritsa there are many still unopened, and more are being discovered in the neighbourhood), cannot well be connected with invasion from the sea. Chalandritsa is two hours' motor run from Patras, and Goumenitsa is another two hours on foot. The tombs differ considerably from their rock-cut prototypes at Mycenae and Asine. They have generally to be entered by crawling, and it is seldom possible to stand upright inside. This would suggest a considerable period of isolation for the dwellers in these mountains.

[5] Kindly shewn me by the Ephor, Mr. Nerantzoules.

Achaia and no. 9 in our fig. 20 from Kryoneri is of a good fabric not later than L.M. II.

There is plenty of unpublished Late Mycenaean in Thermon, disintegrating flowers and the like, and no lack of it at Kryoneri and Astakos.[1] With so much Mycenaean pottery on the slopes below, I do not share Poulsen's certainty that the wall at Kryoneri is Hellenic,[2] and certain house-walls probably of Middle Bronze Age date are falling into the ravine. There are geometric graves below, and Neolithic [3] sherds from the gravel pits strew the high-road. From its position it is a key site and demands examination. Kryoneri was probably the ancient Chalkis.

There is nothing definite to report from the rest of Aetolia. I have not seen the sherds from Kalydon and I cannot understand Strabo's notes

Fig. 20.—Sherds from Kryoneri (No. 3 from Astakos).

about Pleuron,[4] another of these elusive sites which change their names. I should be inclined to place Pleuron provisionally at Gyphtokastro, where a wall and a roadway on the North side may be Mycenaean, though I found no Mycenaean sherds. There is another old wall beside the theatre

[1] For Astakos see p. 243 below.

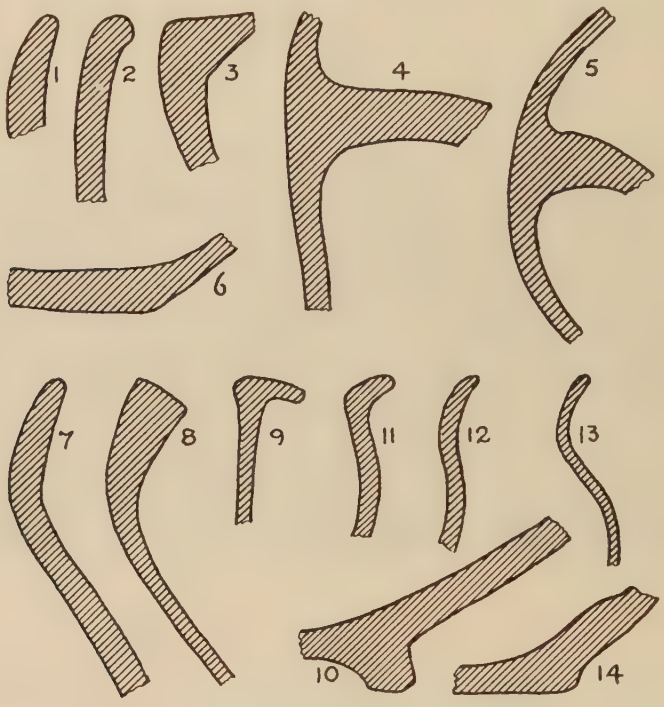
[2] Poulsen and Rhomaios, *Kalydon*, pl. LIII, p. 51. Mycenaean sherds: fig. 19, nos. 1–6 (7 from Kekropoula), 10–12; fig. 20, nos. 8, 9. Mr. Nerantzoules called my attention to Mycenaean pottery on this site.

[3] Neolithic sherds: fig. 19, nos. 8, 9, 13 (fig. 20, no. 3 from Astakos); geometric sherds, fig. 20, nos. 1, 2, 4–7, 10, see also fig. 21.

[4] Strabo 459 (X, 21): 'After (*i.e.* East or South of) the Euenos (the Phidaris) is the hill Chalkis which Artemidoros calls Chalkian. Then comes Pleuron, then the village of Halikyrna, 30 stades inland from which lies Kalydon.' He then proceeds to Taphiassos and the Lokrian borders. The hill East of the Euenos must be Varasovo, and at its foot is Kryoneri, which cannot possibly be Pleuron. Confusion is evident when Strabo speaks of a village seawards of Kalydon, now well behind us, as also when he chides Artemidoros for putting the hill Chalkis between the Acheloos and Pleuron, as he himself seems to have done in the preceding sentence.

at Oiniadai. Without seeing sherds I do not feel competent to pronounce on the tomb near Chrysovitsa.[1]

Mr. Thompson [2] reported Mycenaean sherds from Palairos (Kekropoula) and I can add a little further evidence. Part of the wall near the South-West gate (fig. 22) [3] has a venerable aspect; it is surmounted by, and is therefore earlier than, neat polygonal masonry which in turn has a wall of fourth-century or later type built against it. The gate is



KRYONERI

Fig. 21.—Sections of Pottery. (Scale 2 : 3.)

crowned by an enormous block which might well have been a Mycenaean lintel. However that may be, the oldest wall has fallen away a little further along and in the fill I found rough pottery probably of Mycenaean date and fig. 19, no. 7, which is the shoulder of a stirrup vase.

The tomb-breakers at Kekropoula are still active. I found seven inscriptions (figs. 23, 24), only one of which (no. 3) was seen by

[1] Koronta, Πρακτ. 1908, p. 100.
[2] Thompson, *L.A.A.A.* 1912, p. 133.
[3] Photograph Akarnania, No. 61, by kind permission of the German Archaeological Institute.

K. Rhomaios in 1916.[1] The volcanic limestone used for these stelae seems to be susceptible to the weather; No. 7, for instance, will soon be illegible. I had only time to examine a small part of the hillside to the North.

Mr. Tod considers that there is no need to regard any of these inscriptions as later than the third century B.C. The lettering is good and careful.

FIG. 22.—WALLS OF KEKROPOULA.

1. ΔΕΙΝΩΝΟΣ. Width of tombstone at bottom 27 cm.: at top 23 cm.: length 70 cm.: depth 9 cm. There is a small palmette at the top. Pape-Benseler give many references for this name: Xen. *Hell.* 5, 4, 33.
2. ΜΝΑΣΙΚΡΑΤΕΟΣ. Width 28 and 26 cm.: length 62, depth 11 cm. Note the West Greek α where Attic would have η, and the uncontracted genitive. I cannot find examples of Kratos used as a personal name; the deity is the son of Pallas and Styx, Hes. *Th.* 385.
3. ΔΙΝΔΥΛΑΣ. Width 18 cm.: length 45 cm.: depth 8 cm. Rhomaios

[1] Δελτ. 1916, Παράρτημα p. 49.

does not remark how curious this name is, though the reading is quite certain. It looks as if it meant 'the little twin.' [1]

4. ΚΛΕΟΝΙΚΑ. Width 29 and 23 cm.: length 72 cm.: depth 9 cm.; a woman's name. It is uncertain whether a sigma should be supplied at the end. Plut. *Cim.* § 6.

5. ΕΥΚΛΕΟΣ. Width 28 and 26 cm.: length 66 cm.: depth 7 cm. Note again the un-Attic lack of contraction. A very common name, Thuc. IV, 104, etc.

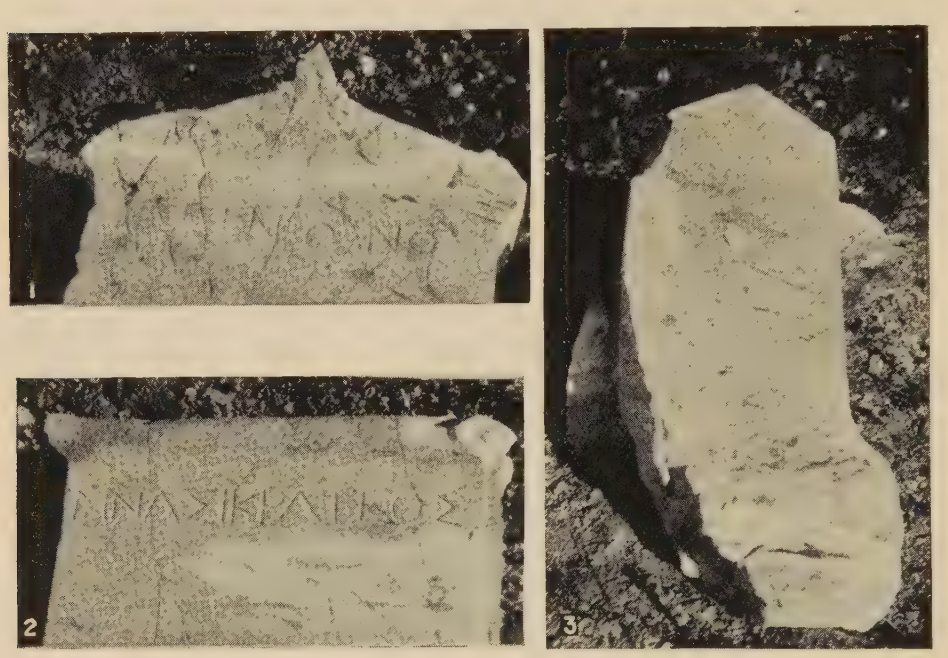


Fig. 23.—Inscriptions from Kekropoula. (Scale 1 : 5.)

6. ΜΥΜ|ΝΟ. Width 16 cm. This is made up of two fragments which join. The sides appear to be complete. The letters are spaced curiously far apart. No parallel offered.

[1] For Greek mistakes about Asiatic names, cf. Miss Chrimes' article, *J.H.S.* 1930, pp. 89 ff. Ἄδραστος, p. 91; θαρσεῖς, p. 95, note 22. There seems sufficient confusion between the Greek word δίδυμος = twin and the Phrygian word Dindymene which Kretschmer thinks means height and which is an epithet of Cybele. Strabo, XII, 575, objects that a certain mountain Δίνδυμον is μονοφυές.

Didyma was the name of the site of the Temple of Apollo at Branchidae. Is not this the Greek for Dindyma, and is not Apollo here as at Delphi taking over the oracle of the Great Mother?

Even if Δίνδυλα does mean no more than 'twin,' the persistence of the Phrygian spelling here in the West is interesting.

7. ΔΕ ΞΙ ΑΣ. Width 16 cm., depth 10 cm. Grey limestone. Not illustrated, but I believe the reading to be certain. The letters were

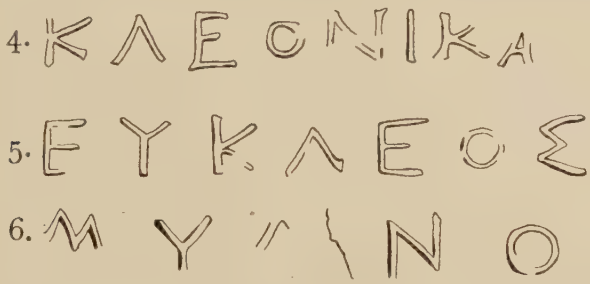


Fig. 24.—Inscriptions from Kekropoula. (Scale 3 : 10.)

written between triglyphs. For the name cf. *I.G.V.* Pt. I, No. 1386, l. 9 (Messenia); *I.G.V.* Pt. II, No. 36, ll. 69, 81, and no. 38, l. 46 (Tegea).

Fig. 25.—Medieval Site, Astakos.

10. Astakos.

I include a short summary of my trial excavations at Astakos.

A medieval site, now called Grabes, lies about half an hour's walk from the sea along the only road (fig. 25). On the Northern flank of the site the rock has been washed nearly bare, and not a single medieval

sherd was found on it. From 6 to 20 cm. of soil remained and this contained almost exclusively Early Bronze Age sherds.

The classical site on the next hillock to the North is separated from our site by a slight dip. A cave with an open mouth lies just below the crown of the cliff at the dip. Several trenches in the opening of the cave and on the ground outside it gave many sherds of good L.M. III B date and some L.M. III A. Below the Mycenaean pottery was an Early Bronze Age deposit, and above, a little Hellenic pottery.

This site commands the communications with the interior and would be a valuable possession for islanders who make their living from cattle and sheep, which must be sent to the mountain pastures in the summer.

A strong resemblance to pottery at Polis, Ithaka, is traceable in the Late Bronze Age. Hardly any later pottery was found.

An hour's walk along the coast West of Astakos brings us to another cave, above the Chapel of H. Nikolaos and 500 ft. above sea-level. We found a considerable quantity of Neolithic painted pottery like that which roused our interest at Meganisi. There are contacts with Thessalian A and B on the one hand, and with Italian Neolithic painted pottery on the other.

Links with the North will require careful consideration: some have already been suggested at Meganisi. At Grabes we had wish-bone handles, the 'Hall-mark of Macedonia.'[1] Here we have a 'crusted bowl'[2] and a frilly handle, the latter again recalling Armenochori.

These travel notes are necessarily disjointed, and I feel they require a summary. Homeric questions have been purposely excluded.

Zakynthos waits excavation, but we can already point to three Mycenaean sites. Except for the Pegasos which is hardly a Corinthian type, close early connections with Corinth are not known, but we shall look for more connections with other parts of the Peloponnese and with Italy and Sicily.

Kephallenia shows considerable differences from its neighbours, and a tendency to insularity. A definite Minyan period is traceable. The Late Bronze Age culture of the island is characterised by an unusual kind of tomb. Its Mycenaean pottery does not resemble that of Ithaka, with which alone we can at present compare it. In the proto-geometric and geometric periods we are reduced to the *argumentum ex absentia*. The almost entire lack of Corinthian[3] pottery among somewhat extensive excavation-results is rather striking, and the coinage of Kranea supports a theory of independence in the Central West.

[1] *B.S.A.* xxviii, p. 180. See also *Alt-Ithaka* Beilage 86 *e*, there called a figurine.
[2] Cf. V. G. Childe, *The Danube in Prehistory*, p. 76, fig. 40.
[3] One sherd to the East of the mountain wall, Plate 41, no. 15.

In Ithaka we shall merely remark that there are prehistoric sites, that the shrines show great riches from Mycenaean times to the sixth century, and a close connection with Corinth, and that about 200 B.C. there was an Odysseian revival.

In Leukas the absence of Mycenaean pottery is truly remarkable, especially in view of its presence in some quantity in Meganisi. Equally striking is the scarcity of Corinthian pottery. Was it not prized by the excavators, or are we to beware of the *argumentum ex absentia?*

The excavations at Astakos raise several interesting questions. Is the likeness to Ithakan pottery accidental? Is the three-colour Neolithic ware which resembles Thessalian A derived from a blend of Thessalian A and B, or from a cognate source? What are the connections of Astakos painted Neolithic with Italy? How close are connections with Macedonia? Excavation at Meganisi and Kryoneri would help the solution of some of these problems. We should also like to know more about the geometric sherds at Kryoneri. The fabric is good but at present we cannot classify it.

II. Kythera.

Though Kythera is one of the Seven Islands, it is geographically far away from the others and I did not intend to include it here. Obviously, however, it must have played some part in the migration of the Mycenaeans and the export of Cretan Geometric pottery. A short visit convinced me that as early as Middle Minoan times it was already a strong Cretan colony and that it maintained a close connection with Crete until the fall of the dynasty in Late Minoan II. I found a little Late Mycenaean pottery, but our best information about this period comes from the tomb excavated by Stais.[1] The survival there of a Middle Minoan steatite vase is now easily explained.

In the cave of H. Sophia near Kapsali, besides polished Bronze Age pottery, there was a sherd with dark on light wavy lines (L.M. I). North-East of the tomb excavated by Stais and West of the church H. Markos, I found part of the base, neck and handle of a L.M. II pithos which was decorated with finger-marked bands. It had been dug up by a peasant. I was shown a L.M. II stone lamp said to come from Palaikastro (Pl. 42, *c*). Remembering that Palaikastro is the provenience of the life-size marble lion (Pl. 42, *b*) now on the battlements of the capital,[2] there is no reason to doubt that this is the site of the Homeric and classical Skandeia.

Most of my researches were conducted at the ancient harbour town of Kastri. The hillock was covered with ruined cement walls and there

[1] Δελτ. 1915, p. 192, fig. 1.

[2] While convinced that it is Greek work I prefer not to hazard a date without further study.

were large bits of fine Roman bowls on the surface. Near the sea on the North-East, cement walls cut into a layer with cups like the H. Sophia sherd; L.M. II amphorae appear beneath a terrace wall. I found part of a M.M. II imitation stone bowl, Kamares sherds, and some hand-painted sherds with red and white intersecting lines, also some L.M. III pottery. One large rock-cut tomb I was able to identify as L.M. I. Asproga, just North of Kastri, is honeycombed with tombs, some of them pillared and beautifully made (Pl. 42, *a*). New ones are continually being found by the peasants.

The excavation of Palaikastro would be a large and perhaps unprofitable undertaking. In Kastri a good deal of information can be obtained with very little cost, and I hope to be able to undertake this work before very long.

The best account of Kythera is Leonhard, *Die Insel Kythera*, where the classical references are given. Riemann, *op. cit.* and Weil, *A.M.* 1880, pp. 224–43 are also useful.

I have to thank Professor Myres and Miss Lorimer for reading this paper.

Sylvia Benton.

FACTS OR FANCIES?

Comme la voix d'un mort qui chanterait
Du fond de sa fosse,
Maîtresse, entends monter vers ton retrait,
Ma voix aigre et fausse.

I AM sorry to be compelled to say again in print what I said first nearly twenty years ago,[1] and said again in 1926,[2] and repeated in company with others in 1930.[3] In 1926 I was stirred to testify by certain criticisms of Mr. Wace's Mycenae report,[4] which criticisms appeared to me to scout the evidence of the facts ascertained in the excavation. I am stirred to it now by a paper by Miss M. Hartley on 'Early Greek Vases from Crete.'[5]

With most of that paper I am not indeed concerned, since unfortunately I am not well acquainted with Greek vases from Crete, except on paper; but what does concern me is Miss Hartley's publication at the end of her paper of several fragments of a Laconian krater found in 1929 at Eleutherna[6] (as it would appear, in an unstratified deposit), and the date, about the middle of the sixth century B.C., that she assigns to it for reasons chiefly derived from the development of parallel forms in Chalcidian and Corinthian pottery. Yet it is not the actual date that troubles me so much as the fact that the writer did not look for her evidence in the obvious place. If Miss Hartley had considered how her vase would fit into the Laconian series, the development of which was definitely ascertained by the excavation of the well-stratified deposits at the shrine of Orthia, she could hardly, I think, have put it later than the very earliest years of Laconian III. The use of white paint and slip on the same vase, the presence of the sigma pattern in this solid form—a Laconian II pattern very rarely surviving into Laconian III[7]—and its position between the rows of small dots, which are exceedingly rare after Laconian II, all these combine to make that classification certain.

The date put forward by the excavators for the beginning of Laconian III is 600 B.C. No suggestion has yet been made that that date is wrong,

[1] Droop, *Archaeological Excavation*, pp. 8–10.
[2] *L.A.A.A.* xiii, pp. 43 ff.
[3] *J.H.S.* 50, p. 330.
[4] *B.S.A.* xxv.
[5] *B.S.A.* xxxi, pp. 56 ff.
[6] *Ibid.* p. 109, fig. 34, 6 and 7.
[7] Mr. Payne has reminded me that the pattern does occur with the dots on a sherd of Laconian V (*Artemis Orthia*, fig. 76, p. 103); that piece, however, stands alone, and its execution is so careless and debased as to prevent its carrying any real weight.

though it is perhaps probable on evidence adduced by Professor Ure that the date for the end of Laconian III should be put a score of years earlier than that originally suggested.[1] Now there is a discrepancy here of nearly fifty years.

I cannot help thinking that if, for the reasons she brings forward, Miss Hartley desired to urge acceptance of the later date, her first step should have been either to shew that the vase falls into the Laconian period appropriate to that date on the dating of the series arrived at by the excavators of the shrine of Orthia, *i.e.* Laconian IV; or, if she could not do that—and I do not think for the reasons given above that she could do it—then she should have set out to show that the Orthia dating is wrong. I do not think it was sound archaeology for Miss Hartley to disregard the ascertained facts of the development of the Orthia series while saying that for such and such reasons it is clear that the vase is fifty years later than its proper place in that series would put it.

I say 'ascertained facts' advisedly, for the development of the Spartan series was not worked out on any stylistic principles by saying that this pattern obviously grew out of that, or that that form must be the direct ancestor of this. Any such arguments would, of course, be disputable, since they would be based on nothing firmer than the preconceived ideas of those who put them forward. But the relative positions and the definite characteristics of the six Laconian periods are not disputable, because those positions and characteristics were clearly marked out by undisturbed stratification. The excavators observed what came first, what came next, and what followed after in the unbroken chain, and labelled the stages accordingly.[2]

It is here that I have to repeat myself by saying again that the evidence of facts derived from the excavation of a well-stratified site must, if there is conflict—as in this case there appears to be—not only not be ignored, but must be allowed to outweigh any arguments drawn from general considerations of style and comparisons with art elsewhere.[3]

I am tired of saying this, and my real complaint against Miss Hartley is that she has forced me to say it again by not taking into consideration the evidence from the Orthia excavations. It may, of course, be urged that the shrine of Orthia was silent on the subject of kraters, since for some reason it was not the fashion to dedicate the krater to Orthia any more than the kantharos. But the study of the Orthia vases showed that the development of their fabric and their patterns was independent of the development of their shapes, and forms a sound criterion for the dating of a Laconian vase of any shape, so that I do not think that this plea would be a good one.

I do not propose to discuss Miss Hartley's arguments in detail. I am

[1] *J.H.S.* 52, pp. 71, 303. [2] Cf. *J.H.S.* 50, p. 332. [3] *Ibid.* p. 330.

not sure that it is worth while until she has shown that the Orthia dating is wrong. But I would point to one sentence which does not suggest that those arguments would be altogether convincing. In discussing other Laconian kraters, and in particular No. 661 in the Louvre, Miss Hartley says: 'the filling ornament already prepares the way for the palmette which is found on the later cups. The date of the krater should be brought down to the middle of the (sixth) century.' Now that can only imply that the palmette is, as a rule at least, to be dated after 550 B.C. But the fact is that the series of palmettes begins as early as the beginning of Laconian III, 600 B.C.

To the fact that Miss Hartley differs from the view as to date that I formed when I examined this vase in 1908 I can, of course, have no objection. There is no direct evidence on the point. My view was formed by comparing the vase with the trustworthy criterion—the series newly dug up at Sparta—while that was still fresh in my mind. But it may well have been an erroneous view. Yet I venture to think that it will not seem right to abandon it in favour of any judgment which ignores that criterion. And here I would remark that I think Miss Hartley has misunderstood the phrase which she quotes from my assessment of the vase—a phrase which was perhaps open to misunderstanding. To say that 'some early Laconian patterns are scarcely to be distinguished from later'—a point which in respect of the periods III, IV, V, no one would dispute—in no way disproves that 'the careful elaboration of the patterns' is an indication of early date. The point lies in the word 'elaboration,' by which I intended to convey, not the complicated nature of the patterns, but the care and refinement with which they are drawn on the vase in question, the *i's* all dotted and the *t's* crossed so to speak, a characteristic of the Laconian style at its height in the early part of Laconian III before any degeneration had set in.

I should like to say here that Miss Hartley has not converted me to the view which she and Mr. Payne hold as to the Cretan origin of the pyxis found at Sparta in 1926 and referred to on p. 61 of Miss Hartley's paper. We differ in opinion as to the clay. Miss Hartley says it is Cretan. I thought it Laconian when I examined the pyxis in 1927. But, leaving that point, I cannot agree that the style of painting must prove the vase Cretan, for the outlined, reserved, technique has parallels in the early seventh century at Sparta—Miss Hartley and I at any rate agree about the date of this vase [1]—and the use of incision on the same vase as the reserved technique is also

[1] As to the style of drawing on this particular vase, a very fair parallel to the hooves of the horses is to be seen on a fragment illustrated in *Artemis Orthia*, p. 67, fig. 40 *m*, and a close parallel to the men's heads, bearded and without moustache, and to the method of showing the hair on the fragment illustrated *ibid.* fig. 41*a*; both of which pieces are Laconian and classed as sub-Geometric.

paralleled in Laconian pottery.[1] Yet the point most convincing to me was the black-glazed ribbing just above, and on, the base of the vase, which is the exact technique used for the rim of the normal very common Laconian I plate.[2] Even the absence of slip, the most unusual feature, has parallels at Sparta in the seventh century.[3] And, as regards the form, unless my memory fails me, a pyxis with fairly straight sides was a common shape, as far as could be judged from fragments, in Laconian Geometric, where the vase in question is at least as likely to find an ancestor as in the straight-sided pithos of Crete. I should, indeed, be disposed to doubt whether the Protocorinthian tall pyxis with upstanding handles really owed anything to the Cretan pithos, but, even granting that, it seems to me a little rash to claim on the strength of that pyxis and that pithos that the shape of this vase adds anything to the likelihood of its having been made in Crete.

It is no doubt a most interesting employment to work out how one form may be derived from another. It is rather the fashion in modern archaeology, and there is, I fancy, nothing to be said against it when applied to works produced in a limited locality and a limited period. But employed outside strict limits the practice is, I think, apt to encourage rather fanciful flights, and apt, too, to lead its followers to the assumption, not perhaps consciously formulated but none the less firmly held, that no similar forms can ever have had an independent origin. That is why, according to some, Stonehenge is derived more or less directly from the Pyramids.

It is this heresy—as I regard it—that has misled Miss Hartley in the case of the Laconian krater from Eleutherna. It looks as if she could not admit the possibility that the krater form may have developed comparatively independently in Laconia at an earlier time than in the districts where she finds the analogies that have led her to her date, a date which I think she would have seen was impossibly late, if she had referred the vase to the safe criterion lying to her hand in the published evidence from the Sanctuary of Artemis Orthia. Yet in itself such independent development is not only possible but probable, since among other things the excavations at Sparta showed that the Laconian potters had few opportunities of profiting by foreign ceramic influences.

I began with a quotation from Verlaine, and I may end with one from an English author, which is perhaps equally in place: '*Il est fatiguant*, whispers Mr. St. John, *avec sa trompette de Wynandael*.'

J. P. Droop.

[1] *B.S.A.* xxviii, p. 66, fig. 10. Incision is found on Laconian Geometric, *ibid.* p. 52, fig. 1 *g*.

[2] E.g. *Artemis Orthia*, p. 71, fig. 44 *a* and *f*.

[3] *Ibid.* p. 73 and fig. 47 *f*.

FACTS.

I AM grateful to the Editors of the *Annual* and to Professor Droop for allowing me an early opportunity of replying to Professor Droop's criticisms of my attempt to date the Laconian krater from Eleutherna (*B.S.A.* xxxi, pp. 111 ff.).

I dated the fragments of this krater, on consideration of the history of the shape, to the middle of the sixth century; Professor Droop complains that I did not use evidence obtained by the excavators of the shrine of Artemis Orthia at Sparta and set out in the official publication. Now he admits that the shape was not found at Orthia [1] (and he might have added that it has not been found elsewhere in a stratified deposit); there is not, therefore, any question here, as Professor Droop seems to think, of conflict between 'the evidence of facts derived from the excavation of a well-stratified site' and arguments drawn from considerations of style. For the stratified site in question produced no evidence for the date of vases of this shape, and his criticism therefore collapses at the outset.

What Professor Droop is really complaining of is that I did not use, for the dating of the Eleutherna vase, all the evidence of *style* afforded by the Orthia excavations—a curious complaint from one who is evidently thoroughly suspicious of evidence of this kind; but he is quite right; for I did not refer to *all* the evidence, as some of it seemed to me to be superfluous, serving merely to shew (what is well known) that a vase with patterns of this kind *may* be even later than the middle of the sixth century. However, as Professor Droop challenges me to use the evidence of style produced by the excavations of the shrine of Orthia, I shall do so; I think he will be bound to admit that this shews conclusively that the date I suggest, about 550 B.C., is well within the limits of possibility.

Let me examine Professor Droop's argument; he describes the solid sigma pattern between rows of dots as a Laconian II pattern (625–600 B.C.), admitting that it survives, very rarely, in Laconian III; however, a fragment published in *Artemis Orthia*, fig. 76, p. 103 (*B.S.A.* xiii, p. 134, fig. 10, *a*) shews the same combination of sigma pattern and a row of dots; it comes from a well-stratified site and was placed by Professor Droop in Laconian V (500–425 B.C.)! Professor Droop

[1] For the finding of the fragment published in *B.S.A.* xxviii, p. 71, fig. 13, *b*, see *ibid.* p. 49. There appears to be no record of the circumstances of the finding of the fragment which came to light at Sparta in 1925 and is shewn in a case in Sparta Museum beside sherds from Orthia; this is the piece mentioned by me in *B.S.A.* xxxi, p. 113, and by Kunze in *Gnomon*, January 1933, p. 7, note 1.

would ignore this piece of evidence for the survival of the pattern after 600 on the ground that it 'stands alone,' and that its 'careless and debased' execution deprives it of weight as evidence. A difficult position to maintain, if it did stand alone; but in fact it does not; for the same pattern occurs, executed in precisely the same manner, on a krater in the Louvre (*C.V.A. Louvre* III, D c, Pl. 1, 1) which, according to Professor Droop, would therefore also be Laconian V. But I should like to know how this is to be maintained by anyone who has dated the krater Louvre E 661 (*C.V.A. Louvre* III, D c, Pl. 6, 1–2) to 'early Lac. III, *c.* 585,' as Professor Droop has done:[1] for here, on the rim, we see again the same 'careless and debased' execution, which seemed to Professor Droop to justify him in setting aside the evidence of his own Laconian V fragment! Further, for summary execution of the sigma pattern, what of *Artemis Orthia*, fig. 46, *r* (p. 74), which is dated by Professor Droop Laconian II?

The evidence from Orthia, then, which is the thing which Professor Droop most urgently demands, so far from invalidating my case, actually strengthens it; for it shews that the sigma and dot pattern continued at Sparta long after Laconian III; and the kraters in the Louvre shew that a summary form of it was already used during the sixth century. Anyone who will look at the series of kraters in the Louvre *Corpus* will realise that the heavy solid form of the pattern (the form found on the Eleutherna vase and in *C.V.A. Louvre* III, D c, Pl. 2, 7), though it may no doubt be typologically earlier, existed at the same time as the form remarkable for its poor execution (*Ibid.* Pl. 1, 1), which we find also in the closely related meander pattern on the greater number of these vases. If this view is not accepted, then the only alternative is to regard the vase shewn in Pl. 2, 7 as Laconian II or, at the latest, early Laconian III, and that shewn in Pl. 1, 1 as Laconian V—to separate them by at least 100 years!

I have here to admit that an error appeared in my description of the Eleutherna krater, *B.S.A.* xxxi, p. 111; 'the decoration is in white paint' should read 'the decoration is on the white slip'; this error is the more regrettable because the use of white paint and slip is mentioned by Professor Droop at the outset as one of the features which led him to classify the vase as early Laconian III at the latest: he gives this point only a passing mention, but I might add that vases of this shape on which white paint and slip are found together are Louvre Nos. 685, 689, 690 (*C.V.A. Louvre* III, D c, Pl. 1, 1, Pl. 2, 2, Pl. 2, 5); others in the Louvre series, like the fragments from Eleutherna and a fragment from Naukratis in the British Museum, have no white paint, others even have no white slip. The difference in technique is not an indication of difference of date.

So much for the stylistic evidence afforded by the excavation of a

[1] *J.H.S.* xxx, p. 33.

well-stratified site. I may now mention a piece of evidence of another kind which Professor Droop has not used (it is not from Sparta). This is a grave group from Rhodes; [1] in this grave, which is surely worth mentioning as giving the only external evidence we have for the date of Laconian kraters, was found a krater of the type in question, but decorated on the rim with a meander. It was found with an Attic amphora which is obviously not earlier than about 540 B.C., a cup which looks a little later than this, and a Rhodian siren-alabastron of about the same date (it is of distinctly developed style); one of our Laconian kraters, then, found with three vases of about contemporary date, 550–540. This is no conclusive proof, but it is clearly valuable evidence in connection with the other indications of date.

As for the history of the shape and its occurrence in other fabrics, Professor Droop seems to find here nothing of importance. I shall merely add to my remarks on this subject in *B.S.A.* xxxi, pp. 112–13, and to the references there given, that Mr. Payne places the *earliest* Corinthian example at about 570 B.C.; the middle of the sixth century still seems to be the date of our Laconian krater, which is distinctly later in form.

'To admit the possibility'—and Professor Droop, regretfully, thinks me incapable of this—'that the krater form may have developed comparatively independently in Laconian at an earlier time' than in Corinthian vase painting, would be, clearly, to cherish a fancy and ignore the facts—the facts, among others, that the summary form of the sigma pattern occurs in a well-stratified site as early as Laconian II, as late as Laconian V, and that a Laconian krater was found in a grave with three vases of about the same date, 550–540.

I may now pass to the Laconian krater in the Louvre, E 661. In disagreeing with my dating of this vase, Professor Droop first misrepresents my view by reading only the last few words of one of my sentences; if he will read the whole of the sentence of which he quotes a part, he will see that I do not date all palmettes on Laconian cups after 550, but that I am considering, not the occurrence or non-occurrence of palmettes or other ornaments, but the manner in which they are executed; and in one part of the same sentence I compare the drawing upon the Louvre krater and upon a cup on which a palmette does in fact occur. Nor does Professor Droop do me justice in assuming that 'by the careful elaboration of the patterns' I understand him to mean anything else than the care and refinement of the drawing of the patterns; in referring to the patterns of the vase shewn in *B.S.A.* xv, p. 29, fig. 5 (which I compared with the patterns upon the Arcesilas cup) I could scarcely be pointing to any complication of design—for the patterns are simple—but only to the carefulness with which it was executed—'the *i*'s all dotted and the *t*'s

[1] *Clara Rhodos*, III, p. 199, fig 193 (tomb 185).

crossed.' Indeed, Professor Droop has not succeeded in weakening the force of any of the considerations which led me to date the krater in the middle of the sixth century.

Professor Droop adds that he cannot subscribe to the view that the pyxis found at Sparta in 1926, which he considered Laconian, was made in Crete. He assumes that by the *style* of the drawing, which I take to be Cretan, I mean the outline technique of the heads, for which he finds parallels at Sparta; but, indeed, the outline technique is found in most fabrics in the archaic period: the style of the drawing still seems to me distinctively Cretan.

Professor Droop considers that I hold this pyxis and the Protocorinthian tall pyxis to be the same; but I wrote that the Protocorinthian is derived from the tall straight-sided pithos of Crete, and that the pyxis in Sparta is indeed related to the tall straight-sided pyxis, though shallower. Still closer parallels to the shape of the vase in Sparta have now been published, broad low jars of large size found by Dr. Levi at Afrati.[1] Professor Droop thinks he remembers that a pyxis with fairly straight sides was a common shape in Laconian geometric; I cannot find that he has mentioned the shape in his publications of Laconian pottery;[2] this does seem rather a pity, if it is a common shape.

My article in *B.S.A.* xxxi was already in the press when Dr. Kunze's review of *Artemis Orthia* appeared in *Gnomon*, January 1933. There Dr. Kunze on p. 7 gives a late date to Laconian kraters, basing his judgment on the history of the form.

Professor Droop complains, wearily, that I have forced him to repeat the fact that Orthia was a well-stratified site which produced external evidence for the chronology of Laconian pottery. I hope that the foregoing pages will be enough to shew that he need not have felt stirred by me to testify yet again. The importance of the excavation, and the care and efficiency with which it was carried out are matters of common knowledge; and there is little danger that other workers in this field will ignore the valuable evidence it produced. But there are some points upon which, though other voices speak to those who will hear, Orthia herself was silent; and since the goddess herself chose this course, it is perhaps injudicious for the devotee to attempt to force her utterance.

M. Hartley.

[1] Cf. *Annuario*, x–xii, p. 257, fig. 308. A link between these and the tall pyxis, a tall vase with handles at the sides; *L.A.A.A.* 1925, Pl. V, *c*.

[2] See *B.S.A.* xiii, pp. 121–23; p. 122, fig. 2 (or do the pyxis shapes in fig. 2, *p* and *r*, qualify for consideration here?); *B.S.A.* xxviii, p. 54; *Artemis Orthia*, pp. 56–59; p. 57, fig. 31. A subsequent decided preference for 'the pyxis form' is noticed among the Orthia fragments in *B.S.A.* xiii, p. 124, but the shape is neither more fully described nor illustrated, there or elsewhere.

ANNUAL MEETING OF SUBSCRIBERS

The Annual Meeting of the Subscribers to the School was held in the rooms of the Society of Antiquaries, Burlington House, on Tuesday, 8 November, 1932, Sir Reginald Blomfield, R.A., in the Chair.

The Chairman of the Managing Committee, Mr. George A. Macmillan, presented on their behalf the following Report for the session 1931–1932 :—

Managing Committee.—The vacancy on the Committee created by Miss C. A. Hutton's death has been filled by the election of Prof. Bernard Ashmole.

Mr. B. S. Page relinquished the secretaryship on his appointment to a post in the Birmingham University Library. Most fortunately, Mr. W. R. LeFanu, who had served the School so well in that capacity before he was promoted to a responsible position at the Royal College of Surgeons, found it possible to accept re-appointment as Secretary to the School from October 1931, to the great satisfaction of the Committee and all concerned.

The Committee had the great pleasure of electing Miss Lamb an Honorary Student of the School.

The Director (Mr. H. G. G. Payne) arrived in Greece on November 14, 1931, and left on July 15, 1932. He was occupied with work on the finds from the two previous years' excavations at Perachora until March 26, when he left Athens to resume the excavations. After June 11, when the excavation ended, he was again in Athens at work on the finds.

Mr. Payne now completes his third year of office; the Committee has had much pleasure in re-appointing him for a further term of three years.

The Assistant Director (Mr. W. A. Heurtley) was in Ithaca from August 5 to October 15, 1931, in charge of Sir Rennell Rodd's excavations. From

May 2 to July 2, 1932, he was at Troy, taking part in the excavations of the University of Cincinnati. Early in August 1932 he resumed the excavations in Ithaca. In the intervals at Athens he worked on the finds from his previous excavations in Macedonia and on those from Ithaca, prepared an article on protogeometric vases, and a paper for the Prehistoric Congress which was held in London in July 1932.

On financial grounds the Committee in November last reluctantly came to the conclusion that they were not in a position to re-appoint Mr. Heurtley as Assistant Director. During the nine years that he has held the office both he and Mrs. Heurtley have done excellent service to the School in the management of the Hostel and Library, and Mr. Heurtley has very efficiently taken charge of the School during the Director's absence from Athens, while his successful excavations in Macedonia have added to the prestige of the School in the field of archaeological research. He has also taken charge of the excavations in Ithaca promoted by Sir Rennell Rodd. Resolutions of thanks and appreciation were passed by the Committee in favour both of Mr. and Mrs. Heurtley at the same time that notice was given of the termination of the appointment.

In order that the administration of the School may not unduly suffer from the lack of an Assistant Director, the Committee propose to revert to a plan which worked well in the earlier days of the School by appointing Mr. R. J. Heald Jenkins, holder of the Macmillan Studentship, as Senior Student, with the special duty of assisting the Director in carrying out the manifold requirements of his office, the Director keeping in his own hands the administration of the Library. It is hoped that the new arrangement will work to the satisfaction of all concerned.

The Curator of Knossos (Mr. J. D. S. Pendlebury) was in Crete from the end of March to the end of June. Assisted by Mrs. Pendlebury he made much progress with the task of arranging, labelling, and cataloguing the boxes of sherds in the store-rooms at the Palace; part of this catalogue is now being prepared for publication. He also completed his Guide to the Palace, and made extensive tours to Cretan sites, collecting material for an archaeological guide to Crete.

The Architect of the School (Mr. P. de Jong), whose resignation has been accepted by the Committee with great regret, was present during almost the whole of the excavation at Perachora, and both before and after this worked in the National Museum, making drawings of the finds.

Students.—Mr. R. D. Barnett, B.A. (Corpus Christi College, Cambridge), returned to Greece in November with a grant from the Craven Fund to make a special study of East Greek art. He returned to England in April, and was appointed to fill a vacancy in the Department of Egyptian and Assyrian Antiquities at the British Museum.

Miss S. Benton, M.A. (Girton College, Cambridge), continued her study of the Ionian Islands. In July she conducted a short trial-excavation at Astakos in Akarnania.

Mr. J. K. Brock, B.A. (Trinity College, Cambridge), came to Greece in March, and assisted Miss Lamb throughout the excavations at Mytilene.

Mr. T. Burton Brown, B.A. (Emmanuel College, Cambridge), was prevented by illness from going to Greece.

Mr. E. R. F. Cole, B.Arch., F.R.I.B.A., spent part of April and May in Greece as holder of the Bursary of the Royal Institute of British Architects. He studied design and technique in the earlier periods of Greek architecture, paying particular attention to colour.

Mr. C. C. Cremin, M.A. (University College, Cork), holder of a Travelling Studentship of the National University of Ireland, made a general study of Greek sites and topography. He assisted Miss Benton during the first part of her excavation at Astakos.

Mr. G. T. Griffith, M.A. (Fellow of Gonville and Caius College, Cambridge), also made a general study of sites and topography, and took part with Mr. Jenkins in the excavations at Isthmia.

Mr. R. J. H. Jenkins, M.A. (Emmanuel College, Cambridge), completed the first draft of his study of the prehistoric population of the Peloponnese. He conducted a trial-excavation at the Isthmian Sanctuary, and assisted during a great part of the excavations at Perachora.

Miss W. Lamb, M.A. (Newnham College, Cambridge), Hon. Student, conducted a long campaign of excavation in Mytilene from March 22 to July 5, with intervals in which she investigated sites in Chios, and visited Troy and Angora.

Mr. H. Megaw, B.A. (Peterhouse, Cambridge), holder of the Walston Studentship, was occupied with a study of Byzantine architecture. While in Athens he made drawings of the Church of the Holy Apostles as a basis for a study of its position in the development of Christian buildings. He later made a study of the ninth-century church at Skripou and of that in the monastery of Sagmata. He also made a detailed study of the churches on Salamis, visited Salonika, and attended the trial-excavation at Isthmia, making drawings and a survey of the site.

Mr. R. L. Roberts (Exeter College, Oxford), Clarke Student, visited the principal sites in central and southern Greece.

Miss R. D. Smith, B.A. (St. Hilda's College, Oxford), studied early Greek sculpture.

Miss B. Wilkinson, B.A. (St. Hilda's College, Oxford), holder of the School Studentship, studied Greek bronze-work, particularly the use of applied figures

on archaic vases and tripods. She assisted for over a month in the excavation at Perachora.

Mr. R. E. Wycherley, B.A. (Queens' College, Cambridge), came to Greece with a grant from the Craven Fund, and collected the material for a volume of illustrations to Pausanias, which is to appear in the Loeb series.

Two students of the British School at Rome, Miss C. E. Gibson and Mr. J. T. A. Osborne, also stayed for some time at the School, as did Mr. R. W. Hutchinson, Miss N. Six, Mr. and Mrs. R. G. Collingwood. Two parties of visitors from the Hellenic Travellers' Cruises were entertained at the School by the Assistant Director and Mrs. Heurtley, the Director being absent at Perachora.

Open Meetings and Lectures.—In England the Director lectured in November to the Annual meeting of Subscribers at Burlington House and at Cambridge on the Perachora excavations, and again in March at the School. He gave informal instruction to Students in the National Museum and the Acropolis Museum. The Assistant Director lectured at the School on his excavations in Macedonia, and in the Hall of the Greek Archaeological Society on the excavations in Ithaca.

Excavations were conducted at the following sites: at the temple of Hera Akraia, Perachora, by the Director, in Ithaca by the Assistant Director, and in Mytilene by Miss Lamb; trial-excavations were made at the Isthmian Sanctuary by Mr. Jenkins, and at Astakos in Akarnania by Miss Benton.

The School's Excavation at the Temple of Hera Akraia

The principal objective of the third excavation at Perachora was the clearing of the area in which a great quantity of small objects dedicated to Hera had been found in the two previous years. Immense numbers of votives were again discovered: further, the foundations of a very early temple of Hera, a great part of the walls which surrounded the sanctuary, and other interesting topographical features came to light.

The precinct has now been cleared. It appears to have been rectangular, the east wall, the whole length of which can be traced, measuring 25 metres; of the north wall 13 metres are preserved, but the deposit of votives suggests that on this side and on the south (where the Sanctuary is bounded by rock) the length was at least 30 metres. The foundations of the temple lie in the south-eastern part of this area. The building faces north and south, and measures 9·5 × 5·5 metres. Two courses of rough foundations are preserved. Almost exactly in the centre of it is a rectangular sacrificial pit, bordered with stone. This pit measures 1·4 × 1·05 metres; it was entirely filled with ash. The presence of an altar or sacrificial pit inside the building is a rather unusual feature which is paralleled by early temples in Crete, and elsewhere.

The temple itself was evidently kept clear of votives, for it contained remarkably few sherds. In the immediate neighbourhood, however, there

was a particularly rich deposit of pottery, ivories, scarabs, and so forth. It was evident from the relation of the lowest strata to the foundations of the building that the building in the form in which we have it goes back at least to the early seventh century. This conclusion tallies with evidence derived from a series of painted roof-tiles which must have belonged to a very early phase of the temple and which are undoubtedly of seventh-century date. Some of the tiles of this series were found in the immediate neighbourhood of the building, others a certain distance away. They are easily distinguishable from the majority of the roof-tiles found, both by their large scale and by their fabric. The best example is almost complete: it consists of a very

PERACHORA. Bronze dove (seventh century B.C.).

large flat tile made in one piece with two cover tiles—a unique shape. On the front of the cover tiles are painted volutes and palmettes, and on the flat tile a black-and-red cable. The shape and patterns indicate a date considerably before the end of the seventh century. The deposits near the temple are fairly well stratified in broad chronological series. In the western part of the Temenos, where there are considerable remains of later buildings, the deposits were, as previously, found not to be chronologically stratified.

The bronzes found this year include, besides a great number of other small objects, several Geometric horses, a lion and a gorgon like those found in 1930, another lion, a cow and (at some little distance west of the Heraeum) a dove of fine Proto-Corinthian style, dating from about the middle of the seventh century. There are likewise a great number of ivories: as against some twenty circular seals with engraved designs found in the two previous

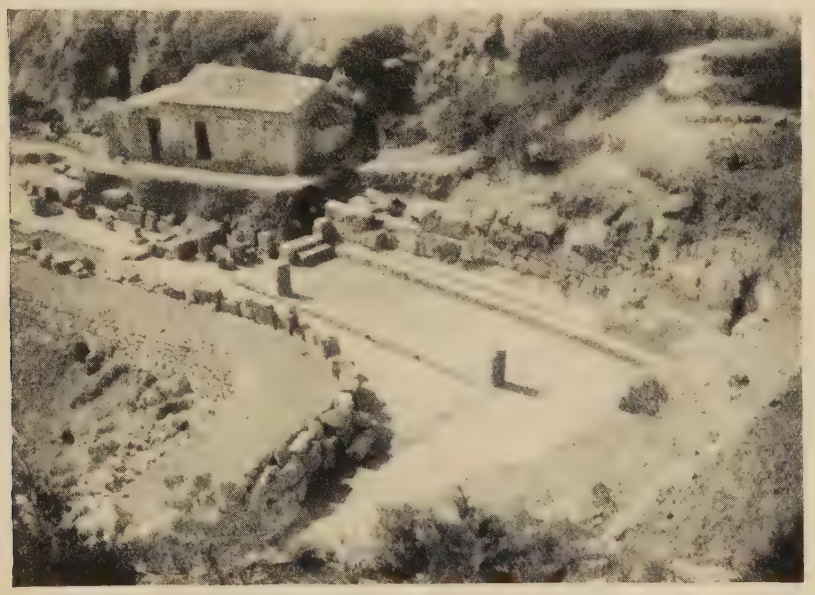
years, over sixty were found this year, together with a large collection of 'spectacle' fibulae, ivory and amber fibulae, pendants, and the like. There are further seven figures of couchant animals more or less closely resembling those from Sparta, and a bone figure of the goddess which has some Laconian parallels. The most remarkable ivory yet found, and one of the finest early ivories ever found in Greece, is a Sphinx nearly three inches high, carved in the round, an early Dedalic work of the first quarter of the seventh century.

The pottery naturally still awaits detailed study, but two inscribed fragments (one of the seventh century, one of the late sixth or fifth) must be mentioned since they record dedications to Hera Limenia (Hera of the Harbour); it may be remembered that the same dedication was found on a bronze bull discovered last year. Thus in the only three instances in which the goddess has an epithet she is described by a name other than that which is recorded by the literary sources, and, further, by one which does not at first sight commend itself, since the place possesses no good harbour in the ordinary sense of the word.

The only other category of finds which can be mentioned in a brief summary is that of imported objects. These were again extraordinarily plentiful: some 500 fayence scarabs, beads and small figures were found, bringing the total for three years to over 750—a number considerably larger than that of all the sites of mainland Greece put together, and all the more surprising since only one scarab has been found in Corinth. Some of these scarabs are said certainly to be Egyptian, others, apparently, may be Cypriot or Syrian. Certainly Cypriot is a large bronze earring plated with gold. The imported pottery found this year is as follows: Attic, Laconian, Argive (terracottas and many pieces of a very large Geometric crater), Theran, Rhodian, Naukratite, Etruscan bucchero, and a small votive altar of West-Greek fabric. An interesting illustration of the Argive connection is given by a clay plaque of the early seventh century which was made in the same mould as a plaque found in the excavations of the Argive Heraeum. The most surprising of the imports is, however, a bronze belt-clasp in the shape of a lion, schematically rendered: precisely where this was made cannot be said, but comparison with certain Scythian and Cappadocian bronzes undoubtedly gives a general indication of its place of origin. Lastly, as probably imported from some East-Greek city, must be mentioned a carnelian scarab with an engraved design of Herakles about to shoot an arrow; this is one of the finest existing gems of the late sixth century.

After the clearance of the Heraeum area some trenches were cut in the steep slope just above the seashore, due east of the harbour temple. These revealed a wide expanse of pavement made of pebbles set in cement, and in the systematic excavation which followed a Doric Stoa, built of limestone, with pebble-floor, was uncovered. This is the best preserved of the buildings so far found at the Heraeum. It is an L-shaped building, measuring a little over seventeen metres along each of the back walls, with a façade of six Doric

columns on each arm (the angle column counted twice). One column drum was still standing in position, and one other was found near the stylobate. The rest have disappeared. The back wall is well preserved at the west end and at the central angle, but has been barbarously rebuilt in the centre of the western arm. Almost the whole of the entablature can be reconstructed with certainty from fragments (often of great size) found within the stoa; what is more, on the fine marble stucco with which the building was faced there are many clear traces of red, blue and black patterns, which makes it possible to restore the colour scheme of the whole. A great many pieces of architectural



PERACHORA. The Stoa, and Chapel of St. John.

terracottas were found; these are nearly all decorated with palmettes in the style of the late fifth or early fourth century. This is the date to which several other features of the building point. A number of fragments of Ionic half-columns were found inside the building and certainly belong to it: it is possible that they formed a façade on the inside of the back wall at some height above the ground, but their position has not yet been fixed with certainty. The Ionic capitals bear an obvious resemblance to those from the temple at Bassae.

Close to the stylobate of the stoa a hand broken from a life-size bronze statue was found. No further trace either of the statue or of its base came to light. The hand may have been broken off while the statue was being carried down to the sea from some other part of the site.

A few yards west of the stoa, and on the same stretch of pebble-pavement,

there is a large base or altar consisting of a frieze of triglyphs and metopes standing on a low plinth—a scheme which recalls other Corinthian and provincial-Corinthian monuments. On either side of this was an Ionic column; the base of one of these columns is preserved, and, like the capitals of the half-columns found in the stoa, shows a strong resemblance to the type used at Bassae. Further excavation at this point was made impossible by the proximity of a chapel of St. John, which stands within three feet of the triglyph base. Permission has been obtained for the removal and rebuilding of this chapel, and it is hoped that this task may soon be undertaken, since until the chapel is removed the buildings in the neighbourhood can never be adequately explained.

The harbour temple (which may perhaps be a temple of Artemis) was further studied, and the foundations which seemed, at the end of the last campaign, to belong to its east front were completely cleared. It is still uncertain whether they are part of the building: if they are not, all traces of the east front have disappeared. The statue-base in the central compartment of the west end was raised. Beneath it were found five small silver coins of archaic type which have not yet been cleaned.

A clue to the loss of the bronze statue, and to much of the damage which the site has suffered, is perhaps to be seen in a Roman house which was uncovered in the 'Agora,' due south of the harbour-temple and only a few yards distant from it. The exact date of this house will doubtless be known when the coins found in it are cleaned; in any case it is Roman of the second century A.D. or later, and was built after the collapse of the walls of the Agora. Further progress was made with the excavation of the Agora, and some fine pieces of painted terracotta cornice dating from the late fifth century were found; also a very fine terracotta head of a woman, two inches high, of late fourth or early third century style.

Behind and above the Agora lies a field composed of white earth, which seemed for several reasons to be of post-classical formation. A trench was accordingly dug across it. The white earth was found to continue to a depth of some fifteen feet, when a black stratum containing pottery was reached. One valuable sherd, part of a very early seventh-century relief plaque, was found here; this area must be further explored, as it is impossible to account for the presence of sherds of this kind except on the hypothesis that there was an early temple in the neighbourhood.

A beginning has also been made with the study of the outlying parts of the site. The architect surveyed the whole area from Lake Eschatiotis to the lighthouse, and planned three of the large ancient cisterns in the fields north-east of the Heraeum valley. The most interesting of these consists of three vertical shafts cut in the rock, and approached from one side by a stairway which runs underground to a depth of over 90 feet. Trial trenches were also dug on the two acropolis rocks, at Hagios Nikolaos and near the lighthouse, where there are ancient fortification walls. Near the lighthouse a fairly well

preserved house with walls dating partly from the archaic, and partly from the Hellenistic, period was found.

It would seem that the greater part of the area which calls for thorough excavation has now been cleared; there is, however, a great deal of subsidiary work to be done, in addition to the task of transplanting the chapel to which reference has already been made. The most formidable task, however, with which the School is now confronted is that of raising funds for the proper publication of the site and finds.

In addition to the Director and the Architect, Mr. Barnett, Mr. Jenkins, and Miss Wilkinson were present for considerable periods of the excavation, Mr. Griffith for a shorter time.

Ithaca

(From Mr. W. A. Heurtley's report.)

The excavations in Ithaca, begun in 1930 on the initiative of Sir Rennell Rodd, were successfully continued in the late summer of 1931. At the prehistoric settlement of Pelikata several more Early Helladic vases were recovered from the lowest level; in the cave of Polis, where work had been suspended in the previous year because sea-level had been reached, Miss Benton succeeded in extracting from the water and mud thirty-five complete vases, and fragments of several others which have not yet been put together. These are almost all of a particularly interesting Late Mycenaean to Sub-Mycenaean class; moreover, although in the upper levels objects of different periods were mixed, it appears as though an undisturbed layer has now been reached from which important finds may be expected in the next campaign. Among the vases were several cups with fluted stems. Later the expedition moved to the south part of the island, to the saddle between Aetos and Merovigli, the top of which overlooks the Bay of Molo on one side, and the channel which divides Ithaca from Cephalonia on the other. Here remains of a fairly extensive Greek town (probably Alalcomenae) were discovered; notable are the lower courses of a square tower (8 × 8 m.) of excellent masonry, part of a defensive system which connected the saddle with the summit of Aetos on the west and the small harbour of Pisaeto on the south. Immediately south of the chapel and alongside of it appeared the foundations of an oblong building (3·5 × 7 m.) resting on virgin soil. Evidence for dating had been obliterated by former excavations, legal and illegal, at this spot, but since Vollgraff digging there in 1904 found several archaic, and other, votive terracottas, it is likely that the building is a small temple of the archaic period.

A few yards to the south-east and lower down the slope there were two deposits of pottery; one resting on virgin soil, the other half a metre above it. Since these deposits (which represent the two earliest phases of the Proto-Corinthian style) are clearly not the remains of settlements, but are successive dumps of votive offerings, it seems almost certain that the temple is contemporary with one or the other of them. In the lower deposit were a few objects

of other materials than clay, in the upper a considerable number: these include a bronze horse, bird, pomegranate, pins and fibulae; various glass beads; ivory or bone buttons, a seal, a plaque, and an amulet; amber beads and a perforated plaque of the same material. To the upper deposit belongs part of a round stone three-legged basin with a rudely incised erotic scene, and a clay vase in the form of a lion.

Interesting to Homeric scholars is the discovery of Sub-Mycenaean remains. Between the temple and the Proto-Corinthian deposits there was a pure stratum, half a metre thick, composed of the debris of a burnt building. This contained a great quantity of pottery ranging from Sub-Mycenaean to Proto-Corinthian. With this stratum, and sharply separating it from the Proto-Corinthian deposits lower down the slope, is associated part of a narrow stone wall of which two courses are preserved. This wall and the character of the debris show that we have to do with some building, and not, as in the case of the other deposits, with temple dumps. Only a small portion of it has been cleared this year, but there is little doubt that it is fairly extensive. The complete excavation of this area should provide interesting results, and will be the principal object of next year's work.

Mytilene (Thermi and Antissa)

(From Miss W. Lamb's report.)

Thermi: Early Bronze Age.—The limits of the early towns I–III have been defined as far as is possible, and the boundary of town IV examined. Though IVB may have had a narrow surrounding wall, the only real fortifications at Thermi belong to town V (Troy II*a* period: *ca.* 2400–2000 B.C.). These were studied in detail: they consist of a wide inner wall, two to four narrow outer walls reinforced with earth, and two well-protected gateways.

Thermi: Late Occupation.—At a later date—before 1400 B.C.—the site was reinhabited by makers of a red pottery that can provisionally be called 'Lesbian Red ware.' It includes shapes which survive from the Early Bronze Age, shapes which can be paralleled in Troy III–V and VI, and shapes which find no exact counterpart. The latest phase of the ware shows imitations of Mycenaean forms, and Mycenaean imports (1375–1200 B.C.) are included among the finds. The Red Wares are slipped, washed, polished, or plain, and recall Hittite Red Washed Ware; grey occasionally takes the place of red.

The remains of a massive terrace wall seem to be contemporary with the earlier stages of the pottery: to the period of Mycenaean imports belong certain houses south of the terrace, in one of which was found a horned dagger of a type which was popular in L.M. II.

Antissa.—The geography of the site has been described in *J.H.S.* LI, p. 202. A trench on the *promontory* was dug to supplement last year's results. Below mediaeval and Hellenistic layers was a good deposit of Lesbian bucchero, including a kantharos inscribed Εὔμαχος. The lower stratum of bucchero

produced early forms known from Troy VI, VII, and elsewhere: with them were found Lesbian Red Ware in the latest phase and Mycenaean sherds, while the Red Wares, still accompanied by one or two Mycenaean sherds, monopolised the lowest half-metre. Farther inland, tests were made in certain fields which had been under cultivation in 1931. Particularly fine bucchero pottery, some of which was decorated with stamped triangles and incised key-patterns, was found here. The discovery of an apsidal wall built in the early style of polygonal masonry known from late seventh-century remains at Eleusis, provides a suitable object for further excavation. The date suggested for this building is supported by the discovery of seventh-century bucchero and Proto-Corinthian sherds inside.

On the *Acropolis*, the beautiful polygonal wall mentioned in last year's report has been cleared. The blocks of which it is made have the curved outline which is associated with Aristotle's Λεσβία οἰκοδομή. On the east it is prolonged by a stretch of regular masonry of later date, which is believed to be contemporary with a buttress in the same style at the south end.

On the hill south of the Acropolis several groups of tombs were detected and explored. They lay in hollows between outcropping rocks, and though the cist graves and clay sarcophagi were practically empty, burial urns of various shapes contained small vases, and, in two cases, traces of ash. A kantharos decorated with imitation nail-heads and wavy bands was found beneath a large deinos which contained a Proto-Corinthian aryballos; the kantharos may, therefore, belong to the eighth century.

Miss Lamb was assisted by Miss Six, Mr. Hutchinson and Mr. Brock.

The Isthmian Sanctuary

(From Mr. R. J. H. Jenkins's report.)

Although the Isthmian Sanctuary has twice been the scene of excavations (French, in 1884–5, and Greek in 1912) it has proved one of the most disappointing, perhaps the most disappointing, of the major Greek sites. As it appeared unlikely that these excavations had entirely exhausted the possibilities of the place, it was suggested that a small trial-excavation might be worth while, particularly in view of the School's work in northern Corinthia. In 1914 the Isthmian Sanctuary had been visited by Fimmen, who had made two important suggestions: (*a*) that the so-called Temenos-wall had nothing to do with the ancient Sanctuary, but was wholly Byzantine; and (*b*) that the classical temple of Poseidon had lain outside this wall, to the west, on an artificially raised terrace where the French excavator Monceaux had indicated remains of ancient buildings.

The first object of this year's excavation was to test these suggestions. The second proposition was tackled first: the artificially erected terrace mentioned by Fimmen proved not to be in the same place as the remains indicated by Monceaux. The latter were found to belong to a Roman building

of some size standing immediately on rock, which showed no traces of previous occupation. Trenches in the immediate neighbourhood yielded the same results. Thus the conclusion of Monceaux, who maintained the late date of the remains in this area, were confirmed. The artificial terrace referred to by Fimmen enclosed a square area towards the west, which again provided traces of Roman occupation only, while a close examination of the actual terracing and rock-cutting showed that these belonged to the same period. On the other hand, investigation of a section of the foundations of the Temenos wall confirmed once and for all Fimmen's view that it is of purely Byzantine origin, having been built in connection with the Peloponnese wall by Justinian (Phrantzes, I, 33). The wall was of uniform construction to the bottom, and late Roman and Byzantine sherds were extracted from beneath it. These results were sufficiently discouraging from the point of view of the main purpose of the excavation, which was to discover traces of the archaic and classical Temenos of Poseidon.

Trials were subsequently made some 200 yards further west, at the rim of a ravine which descends from the modern village of Κύρας Βρύση. Here trial trenches at length produced a considerable quantity of classical (Corinthian fifth-century) sherds; though here, too, the shallowness of the soil and subsequent Roman occupation were again conditions disadvantageous to the good preservation of earlier remains. But lower down, actually in the side of the ravine, abundant and excellently preserved traces of a subterranean water-system of the classical settlement were discovered. The most interesting of these is a passage with a subsidiary cistern, rising to a height of six feet with all its plaster preserved. This invites thorough excavation, for a very small section of earth removed from its mouth produced sherds from the middle of the sixth century B.C., a sixth-century terracotta, numerous fifth-century sherds both Attic and Corinthian, fifth-century roof-tiles (two of these were painted and must have belonged to a building of some importance), and a very small proportion of Roman sherds. The system itself is probably of fifth-century date. No effort was made to empty the passage-way, owing to lack of time, but it is hoped that it will be possible to do so next year.

Finally, it was necessary to test the statements of Monceaux and of the Greek excavator, Stais, as to the shallowness of the soil and absence of anything of classical date in the Temenos itself. For not merely does its natural situation suggest this as the true Temenos, but also its position between the stadium and the theatre, its Roman triumphal arch, and the presence of many fragments of Doric drums of immense size enhance the probability. Stais had placed the level of virgin soil at some 1·50–2 metres below the surface: it was therefore surprising to find that the first trench went down some 5 metres before virgin soil was reached, going through a metre of Roman concrete flooring, the top of which appeared at 1·60 metres below ground level. The lowest metre contained classical sherds and the foundations of a Roman wall: there is reason to think that previous excavators may have

failed to dig deep enough in this part, since the classical sherds found here are, so far as can be ascertained, the only classical objects from the spot.

It is hoped to examine this part of the site, and the site at Κύρας Βρύση, more fully next year, as well as to complete an accurate plan of the whole district.

Astakos

The report on this trial-excavation is unavoidably held over till next year.

The Library.—Total number of accessions 262; in this are included 76 pamphlets and 33 bound periodicals.

Principal purchases: *Antike Denkmäler*, several parts; *Propyläen-Kunstgeschichte*, II; Åberg, *Bronzezeitliche u. Früheisenzeitliche Chronologie*, II, III; *Corpus Vasorum*, six parts; Kraiker, *Die Rotfigurigen Vasen in Heidelberg*; Kunze, *Kretische Bronzereliefs*; Möbius, *Die Ornamente der Gr. Grabstelen*; Neugebauer, *Die Minoischen u. Archaischen Bronzen in Berlin*; Diepolder, *Die Attischen Grabreliefs*; a set of photographs of Byzantine mosaics in the Νέα Μονή, Chios.

Principal gifts: (I) Books presented by their authors—*Der Panmaler* (J. D. Beazley); *An Earlier Religion of Greece in the Light of Cretan Discoveries* (Sir Arthur Evans); *Minoan Art* (E. J. Forsdyke); *Cretan Scripts* (F. M. Stawell); *Corpus Vasorum, Oxford* II (H. Payne, part-author); *The Origin of Chalcidian Ware* (H. R. W. Smith); *Ancestral Portraiture in Rome* (A. N. Zadoks); *Early History of Greece* (C. Hopkins); *Mohenjo Daro and the Indus Civilisation* (Sir John Marshall); *Index Aristophaneus* (O. J. Todd). Other works, mostly pamphlets, were presented by the following authors: R. Vulpe, Ζ. Δ. Γαβαλάς, Α. Ἀνδρεάδης, G. Jacopi, A. R. Bellinger, Y. Béquignon, Γ. Κ. Ναυπλιώτης, W. A. Heurtley, Δ. Λ. Παπαδήμας, Δ. Κ. Τσόποτος, Ι. Χ. Δραγάτσης, O. Davies, H. Payne, R. Heidenreich, W. Miller, V. G. Childe, G. F. Hill, A. D. Ure, F. E. Robbins, J. Addison, Π. Βλαστός, H. W. and J. D. S. Pendlebury, Α. Ε. Κοντολέων, Α. Κ. Ὀρλάνδος, E. Smith.

(II) Other gifts: Brunton, *Qau and Badari*; Petrie, *Beth-Pelet*, I (J. G. Milne); Παπαρρηγοπούλου, Ἱστορία τοῦ Ἑλληνικοῦ Ἔθνους (supplementary volume); Βελμός, Παλαὶ Ἀθήνα; Crawley, *Question of Greek Independence*, and many other books, pamphlets, and periodicals (W. Miller); Mattingly, *Roman Coins* (S. Benton); and other books or pamphlets by R. D. Barnett, H. Payne, and R. W. Hutchinson.

Finally, the Committee have to thank the following Institutions for gifts of books:—The Trustees of the British Museum; the American School of Classical Studies; the French Ministry of Instruction and Fine Arts; the Government of Malta; the Greek Archaeological Society; the University Library of Lund; the Allard Pierson Stichting, Amsterdam University; the Σύλλογος πρὸς διάδοσιν ὠφελίμων βιβλίων; the Institut des Études Catalans;

the American Society of Archaeological Research in Asia Minor; the Society of Antiquaries; the Royal Society of Letters of Lund; the Government of Cyprus; the Cambridge University Press; the Syndics of the Fitzwilliam Museum; the Hellenic Society; the Royal Archaeological Society of Alexandria; the University of Pennsylvania; the Copais Company; the Institute for Comparative Research in Human Culture, Oslo.

The School Property and Premises.—There is little to report under this heading, save that, the municipality at last having decided to make the road in Speusippos Street, the School was obliged to lay a stretch of paving outside the north wall of the garden. No repairs or alterations of importance were necessary within the School property.

Acknowledgements.—The Greek Archaeological Service has by its constant helpfulness again placed the School in its debt: thanks are due in particular to Dr. Kourouniotes, Prof. Oikonomos, Prof. Sotiriou, and the Ephors Mrs. S. Karouzos, Drs. Marinatos and Paraskevaïdes. As may be seen from the accompanying Statement of Accounts an exceptionally large sum was subscribed by the Hellenic Travellers' Cruises in the spring of 1932: Canon W. A. Wigram, to whom as in previous years the collection of these subscriptions was directly due, is asked to accept the School's most sincere thanks. The School is likewise indebted to Miss R. Woodley, who has given valuable help in the administration of the Library; to Mr. S. C. Atchley, of the British Legation, and to Dr. W. Miller, for various services; and to the Copais Company, for hospitality extended to members of the School—in particular to Mr. McElderry, for services rendered to Mr. Megaw while he was working at Skripou. The British Vice-Consul at Candia, Mr. G. Eliades, has as usual readily assisted the School in its administration at Knossos.

Finance.—The Revenue Account for the year shows a debit balance of £98 1*s.* 8*d.* as compared with a credit balance of £30 2*s.* 7*d.* for the preceding year. Annual Subscriptions, as was anticipated in the last Report, show a decrease, being less by £50 at £902. Interest on Investments has increased by £230, mainly owing to the fresh endowment, to which grateful allusion was made in the last Report, but this has been almost wholly absorbed in the higher salary paid to the Director. House and Hostel Maintenance Expenses have together increased by £110, which is partly due to the fluctuation of exchange in the early part of the financial year. The large increase in Architect's Salary and Fees has been brought about by a large claim on his services in respect of Perachora.

The reduction in Annual Subscriptions mentioned above, though possibly to be expected in these hard times, is nevertheless much to be deplored, and it is earnestly hoped that the vacuum may be filled by the attraction of new subscribers.

Mr. Macmillan moved and Prof. A. H. Sayce seconded a motion to convey a resolution of condolence to the family of the late Madame Schliemann on her recent death.

Sir Arthur Evans moved 'that the following members of the Managing Committee retiring by rotation be re-elected members of the Committee for a further three years—Prof. Ashmole, Prof. Dawkins, Prof. E. Gardner, Dr. Halliday and Mr. Tod; and that Mr. V. W. Yorke be re-elected Hon. Treasurer.' The motion was seconded by Mr. Wace and carried unanimously.

Sir Reginald Blomfield, from the Chair, moved the adoption of the Annual Report and Balance Sheet; seconded by Sir Cecil Harcourt Smith and carried unanimously.

Mr. Payne then lectured on Perachora.

H.E. The Greek Minister (M. Caclamanos) moved a vote of thanks to the Chairman and to Mr. Payne, and the proceedings ended.

THE BRITISH SCHOOL AT ATHENS.

1931–1932.

RECEIPTS AND EXPENDITURE ON ACCOUNT OF REVENUE.

3rd October, 1931, to 2nd October, 1932.

Dr.	£	s.	d.
Subscriptions received during the year	902	5	5
Subscriptions received for the year 1930–1931	40	11	0
Subscription received for the year 1929–1930	2	0	0
Government Grant	500	0	0
Grant by the Commissioners of the Exhibition of 1851	200	0	0
Interest on Investments	590	0	0
Interest on Deposit	24	3	6
Sales of Annuals	390	1	3
Receipts from Hostel	214	15	0
Special Donations for Excavations at Perachora (£ 682 12 4) *Less* assigned to Ithaca (£ 48 11 7)	634	0	9
Knossos Site Fund. Income from Rent, and Investments	529	4	0
Balance, being excess of Expenditure over Income	98	1	8
	£4,125	2	7

Cr.	£	s.	d.
House Maintenance (as provided from London to September 30th, 1932)	356	5	7
Hostel Maintenance (as provided from London to September 30th, 1932)	470	0	10
Salary—Director	700	0	0
Salary—Assistant Director	275	0	0
Salary—Secretary	40	0	0
Publication of Annual	423	3	4
Rent	10	0	0
Printing, Postage, etc.	37	4	10
Studentship	100	0	0
Audit Fee	10	10	0
Expenditure on Excavations at Perachora	633	12	1
Director's Service Allowance	50	0	0
Director's Travelling Allowance	50	0	0
Director's Entertainment Allowance	30	0	0
Director's Arrears of Entertainment Allowance, 1929–1931	60	0	0
Assistant Director's Entertainment Allowance	25	0	0
Sundry Expenses	27	8	4
Mycenae Excavation	25	0	0
Maintenance at Knossos :— Mackenzie Pension (£ 150 0 0); Other Expenses (£ 403 0 7)	553	0	7
Architect's Salary and Fees	248	17	0
	£4,125	2	7

RECEIPTS AND EXPENDITURE ON CAPITAL ACCOUNT.

3rd October, 1931, to 2nd October, 1932.

	£	s.	d.
Donations as per List	84	3	0
Entrance Fees	25	4	0
Balance, being excess of Expenditure over Receipts	23	11	11
	£132	18	11

	£	s.	d.
Library	132	18	11
	£132	18	11

BALANCE ACCOUNT—2ND OCTOBER, 1932.

Dr.	£	s.	d.	Cr.	£	s.	d.	£	s.	d.
Subscriptions received in advance				*Investments :—*						
Anniversary Fund . . .				£2,000 India 3% Stock at par .	2,000	0	0			
The Gustav Sachs Trust Fund (Income)				£3,000 5% War Stock at 95 .	2,850	0	0			
Maintenance of Knossos Fund (Capital)				£1,200 Paris Lyon Méditerranée Railway at cost	1,222	13	0			
Knossian Tombs Fund . .				£1,300 Berlin 6% Loan at cost .	1,222	3	0			
Macmillan Studentship (Balance of Income)				£2,000 5% Debenture Stock, Anglo-Celtic Trust, Ltd. .	2,000	0	0			
Knossos Library as per contra .				£2,000 5% Debenture Stock, Foreign and Colonial Investment Trust, Ltd.	2,000	0	0			
Architect's Fees owing . .								11,294	16	0
Add Balance representing the assets of the School other than land, buildings and library as per last account .	11,992	15	2	Income Tax recoverable . .				402	10	6
Less Balance of Capital Account for year	23	11	11	Knossos Library Fund as per contra				16	13	9
	11,969	3	3	Anna Sokrides Fund . .				22	17	9
Less Balance of Revenue Account for year	98	1	8	Cash at Bank . . .				427	6	8
				Cash on Deposit . . .				700	0	0
			11,871							
			£12,864					£12,864	4	8

KNOSSIAN TOMBS FUND.

	£	s.	d.		£	s.	d.
Balance from last Account .	10	17	10	Balance to be carried forward .	10	17	10

MACMILLAN STUDENTSHIP FUND.

	£	s.	d.		£	s.	d.
Balance from last Account .	190	0	0	Grant to Mr. Jenkins . .	200	0	0
Interest from Investments .	200	0	0	Balance to be carried forward .	190	0	0
	£390	0	0		£390	0	0

THE GUSTAV SACHS TRUST FUND.

INCOME AND EXPENDITURE ACCOUNT.

3rd October, 1931, to 2nd October, 1932.

Dr.	£	s.	d.	Cr.	£	s.	d.
Balance from last Account .	78	15	6	Balance to be carried forward .	114	17	0
Interest from Investments .	36	1	6				
	£114	17	0		£114	17	0

KNOSSOS LIBRARY FUND.

	£	s.	d.		£	s.	d.
Balance from last Account .	16	13	9	Balance to be carried forward .	16	13	9

Examined, checked, and found correct,
CRANSTOUN TODD & Co.,
3 Cannon St., London, E.C. 4.
Chartered Accountants.

25*th October*, 1932.

DONATIONS—1931-1932.

	£	s.	d.
All Souls College, Oxford	50	0	0
Exeter College, Oxford	2	2	0
Queen's College, Oxford	5	0	0
Dilettanti, Society of	25	0	0
Fitzhardinge, Miss	1	0	0
Stawell, Miss	1	1	0
	£84	3	0

ANNUAL SUBSCRIPTIONS—1931–1932.

	£	s.	d.
University of Cambridge	100	0	0
University of Oxford	100	0	0
University of London	25	0	0
University of Adelaide	4	0	0
University of Reading	2	0	0
University of Sheffield	2	2	0
University of Toronto	23	11	5
Victoria University of Manchester	5	0	0
The Society for the Promotion of Hellenic Studies	100	0	0
Society of Antiquaries	5	5	0
Balliol College, Oxford	2	2	0
Brasenose College, Oxford	5	0	0
Emmanuel College, Cambridge	5	0	0
Gonville and Caius College, Cambridge	10	0	0
King's College, Cambridge	10	0	0
Magdalen College, Oxford	20	0	0
New College, Oxford	5	0	0
Newnham College, Cambridge	2	0	0
Oriel College, Oxford	10	0	0
Pembroke College, Cambridge	5	0	0
Peterhouse, Cambridge	2	2	0
St. John's College, Oxford	5	0	0
Somerville College, Oxford	2	2	0
Trinity College, Cambridge	10	10	0
Trinity College, Oxford	2	2	0
University College, Oxford	2	2	0
Corpus Christi College, Oxford	5	0	0
Balliol College Library	3	3	0
Fisher Library, Sydney	2	0	0
Leeds Library	2	0	0
London Library	2	0	0
St. John's College Library	2	0	0
Westminster School Library	1	1	0
Otago Institute, Dunedin	2	2	0
People's Free Reading Room and Library, Bombay	2	0	0
Royal Institute of British Architects	50	0	0
Glyn Mills & Co.	5	5	0
Museum of Fine Arts, Boston	2	0	0
University of South Wales and Monmouth	2	0	0
Archäologisches Institut der Deutschen Universität, Prague	2	0	0
The Fellows' Library, Winchester	2	0	0
Westminster City Library	2	0	0
Carried forward	£551	9	5

	£	s.	d.
Brought forward	551	9	5
Adcock, Prof. F. E.	2	2	0
Allen, T. W.	1	1	0
Ashmole, Prof. B.	2	2	0
Bailey, C.	1	1	0
Bailey, J. C.	1	1	0
Barber, E. A.	1	1	0
Barbour, G. F.	2	2	0
Barlow, Sir T.	2	2	0
Benton, Miss S.	2	2	0
Beazley, Prof. J. D.	1	1	0
Benecke, P. V. M.	2	2	0
Bevan, E. R.	1	0	0
Blomfield, Sir R. J.	1	1	0
Boethius, Dr. A.	2	2	0
Bond, Mrs. A. L.	1	0	0
Bosanquet, Prof. R. C.	2	2	0
Brock, J. K.	2	0	0
Brooks, E. W.	1	0	0
Burnet, Sir J.	1	1	0
Buxton, A. F.	2	0	0
Carlisle, Miss H.	1	1	0
Carr, C. T.	2	2	0
Caskey, Mrs. L. D.	2	2	0
Chance, A. F.	2	2	0
Childe, Prof. V. Gordon	2	2	0
Clarke-Thornhill, T. B.	1	0	0
Cooke, R.	1	1	0
Courthope, Miss E.	2	0	0
Crowe, L. A.	1	0	0
Crowfoot, J. W.	2	2	0
Culley, Mrs. E. B.	1	1	0
Currelly, Prof. C. T.	2	1	0
Cuttle, W. L.	2	2	0
Dawkins, Prof. R. M.	2	2	0
Droop, Prof. J. P.	5	5	0
Droop, Miss L.	2	2	0
Dundas, R. H.	2	0	0
Empedocles, Mr. & Mrs.	5	0	0
Erlanger, R.	21	0	0
Eumorfopoulos, N.	2	0	0
Evans, Sir A. J.	10	0	0
Fanning, Miss F. E.	2	2	0
Farrington, B.	2	2	0
Fawcus, G. E.	2	0	0
Fels, W.	2	0	0
Fleming, Miss	2	0	0
Fletcher, H. M.	1	1	0
Forsdyke, E. J.	2	2	0
Forster, Prof. E. S.	1	0	0
Fort, A. J.	1	0	0
Fotheringham, Prof. J. K.	1	0	0
Furneaux, L. R.	1	0	0
Gardner, Prof. E. A.	2	2	0
Carried forward	£673	6	5

	£	s.	d.
Brought forward	673	6	5
Gardner, Prof. Percy	2	2	0
Garstang, Prof. J.	2	0	0
Gerstley, Mrs. J.	2	2	0
Giveen, R. L.	1	1	0
Gleadowe, Prof. R. M.	1	1	0
Gomme, A. W.	2	0	0
Gooch, G. P.	1	1	0
Goodwin, J. A.	2	2	0
Griffith, F. Ll.	1	1	0
Halliday, Miss C.	1	0	0
Halliday, Principal W.	1	1	0
Hart, P.	1	1	0
Henderson, R. B.	1	1	0
Hett, Capt. W. S.	2	0	0
Hill, G. F.	2	2	0
Holroyd, M.	2	0	0
Hopkinson, Rev. J. H.	1	1	0
Impey, E.	2	2	0
Kean, H. H.	2	0	0
Kenyon, Sir F. G.	1	1	0
Lamb, Mrs. M.	10	0	0
Lamb, Miss W.	2	2	0
Lambert, Rev. L.	1	0	0
Leaf, Mrs. W.	2	2	0
Leconfield, The Lady	1	1	0
Lindley, Mrs. J.	2	2	0
Lindsell, Miss A.	2	2	0
Lloyd, Miss A. M.	1	1	0
Lloyd, Miss M. E. H.	1	1	0
Lorimer, Miss H. L.	2	0	0
Low, Miss J. L.	2	2	0
Macan, R. W.	1	1	0
MacIver, D. R.	10	0	0
Macmillan, G. A.	50	0	0
Macmillan, W. E. F.	3	0	0
Malcolm, Lady E.	1	1	0
Mayor, R. L. G.	1	1	0
Mavrogordato, John	2	2	0
Meikle, Mrs. M.	2	2	0
Miller, W.	5	0	0
Milne, Mrs. J. G.	2	2	0
Milne, J. G.	1	1	0
Mitchison, Mrs. N.	1	0	0
Ormerod, Prof. H. A.	1	1	0
Palairet, C. N.	2	0	0
Pantin, Mrs.		10	0
Payne, H. G. G.	2	2	0
Pearson, Hon. Clive	5	0	0
Pearson, Miss E. R.	2	0	0
Pennant, Hon. Alice Douglas	1	1	0
Penoyre, J. B.	2	2	0
Penrose, Dame E.	1	1	0
Petrocochino, D. P.	2	2	0
Carried forward	£829	7	5

	£	s.	d.
Brought forward	829	7	5
Pickard-Cambridge, Prof. A. W.	2	2	0
Piddington, J. G.	2	2	0
Pollock, Sir F.	1	1	0
Radford, Miss E.	1	1	0
Rendall, Dr. G. H.	2	0	0
Rayner, Rev. R.	1	0	0
Richards, Miss C. D.	2	2	0
Richter, Miss G. M. A.	2	2	0
Robertson, Prof. D.	2	0	0
Robinson, Dr. W.	2	2	0
Rodd, Sir R.	1	1	0
Rush, Mrs.	1	0	0
Sadler, Sir M. E.	2	0	0
Salter, Mrs. H. de G.	1	1	0
Seaman, Sir O.	1	1	0
Seebohm, H. E.	2	2	0
Seltman, C. T.	2	2	0
Sikes, E. C.	1	1	0
Sloane, Miss E. J.	2	2	0
Smith, A. H.	1	1	0
Snijder, Prof. G. A. S.	2	0	0
Carried forward	£863	10	5

	£	s.	d.
Brought forward	863	10	5
Spencer-Churchill, Capt. E. G.	1	0	0
Stawell, Miss	1	1	0
Taylor, C. F.	1	1	0
Temperley, R.	1	0	0
Thompson, M. S.	5	0	0
Tod, M. N.	2	0	0
Toynbee, Prof. A. J.	2	0	0
Trevelyan, Prof. G. M.	2	0	0
Tufnell, Miss Olga	1	1	0
Tuke, Miss M. K.	1	1	0
Turle, Capt. C.	1	1	0
Ure, Prof. P.	2	0	0
Vince, J. H.	1	0	0
Wace, A. J. B.	2	2	0
Whatley, N.	2	0	0
Whibley, Leonard	2	2	0
Wigram, Canon W. A.	1	1	0
Wilson, Lt.-Col. H. C. B.	1	1	0
Woodward, A. M.	2	2	0
Woodward, W. H.	2	2	0
Yorke, V. W.	5	0	0
Total	£902	5	5

Subscriptions received during the year :—

	£	s.	d.
For 1929–1930.			
The Fellows' Library, Winchester	2	0	0

For 1930–1931.	£	s.	d.
Archäologisches Institut der Deutschen Universität, Prague	2	0	0
Benton, Miss S.	2	0	0
Colegate, A.	2	2	0
Corpus Christi College, Oxford	5	0	0
Farrington, B.	2	2	0
Fawcus, G. E.	2	0	0
Gerstley, Mrs.	2	2	0
Harrison, Miss C. A.	1	1	0
Loraine, Sir Percy	2	0	0
Museum of Fine Arts, Boston	2	0	0
Ny Carlsberg Glyptothek	2	0	0
O'Connell, Miss K.	2	2	0
The Fellows' Library, Winchester	2	0	0
Tufnell, Miss Olga	1	0	0
University of Marburg	2	0	0
University of Tartu	2	0	0
Carried forward	£33	9	0

	£	s.	d.
Brought forward	33	9	0
University of S. Wales	2	0	0
Wadham College, Oxford	2	2	0
Wellcome Historical Medical Museum	1	0	0
Westminster City Library	2	0	0
	£40	11	0

Subscriptions received in advance, 1932–1933.

	£	s.	d.
Adcock, Prof. F. E.	2	2	0
Budden, L. B.	2	2	0
Burnet, Sir J.	1	1	0
Forster, Prof. E. S.	1	0	0
Giveen, R. L.	1	0	0
Pollock, Sir F.	2	2	0
Sadler, Sir M.	2	0	0
Seebohm, H.	2	2	0
	£13	9	0

PERACHORA EXCAVATION FUND.

	£	s.	d.
Anonymous	203	17	1
do.	2	6	0
Balliol College, Oxford	5	0	0
Emmanuel College, Cambridge	10	10	0
University of Oxford	50	0	0
Alexander, Miss Christine	1	6	11
Beazley, Prof.	1	0	0
Benecke, P. V. M.	2	2	0
Brown, J.	10	0	0
Burn, Miss B.	30	0	0
Crosfield, Sir A.	5	0	0
Culley, Mrs. E.	1	1	0
Cuttle, W. L.	3	3	0
Dundas, R. H.	5	0	0
Eumorfopoulos, N.	1	0	0
Farquhar, Miss H. B.		10	0
Hake, G. B. Gordon	1	1	0
Hellenic Travellers Cruise	15	16	8
do. do. do.	145	14	8
Herbert, A., K.C.	2	0	0
Hignett, C.	1	1	0
Holroyd, M.	5	0	0
do.	5	0	0
Jacobsthal, Prof. Paul	1	0	0
Keller, Verlag H.	1	0	0
Lamb, Miss	5	0	0
Longden, R. P.	1	0	0
Low, Miss Janet	20	0	0
Macgregor, R. M.	5	0	0
Macmillan, G. A.	100	0	0
Mathews, Mrs. Mary	5	5	0
Mathieson, Miss M. L.	1	0	0
Miller, W.	5	14	0
Richards, Miss C. W.	1	1	0
Richter, Miss G. M. A.	5	0	0
Scott Turner, C.	1	1	0
Sloane, Miss E. J.	1	1	0
Tod, M. N.	5	0	0
Ure, Prof. P. N.	1	0	0
Walston, Lady	10	0	0
Ward, S. B.	5	0	0
Webster, Prof. T. B.	1	1	0
	£682	12	4

LIST OF SUBSCRIBERS.

NOTE. Under No. V. of the Rules and Regulations, 'the following shall be considered as subscribers to the School :—

(1) Donors, other than Corporate Bodies, of £10 and upwards.
(2) Annual Subscribers of £1 and upwards during the period of their subscription.'

Under No. VI. 'the following are entitled to receive a copy of the *Annual* free of charge :—

(1) Donors, other than Corporate Bodies, of £20 and upwards.
(2) Annual Subscribers of £2 and upwards during the period of their subscription.'

Subscribers of £1 annually and Donors of £10 to the general funds are allowed to purchase the *Annual* at a reduced rate of £1.

The Hon. Treasurer would be glad to be informed of any changes of address or errors in this list, which is made up to September 30th, 1933.

THE UNIVERSITY OF OXFORD (The Librarian, Ashmolean Museum, Oxford).
*THE UNIVERSITY OF CAMBRIDGE.
THE UNIVERSITY OF ADELAIDE, The Library of.
THE UNIVERSITY OF BIRMINGHAM, The Library, Edmund Street, Birmingham, 3.
THE UNIVERSITY OF LEEDS.
THE UNIVERSITY OF LONDON.
THE VICTORIA UNIVERSITY OF MANCHESTER, Library of.
ARCHÄOLOGISCHES SEMINAR DER UNIVERSITÄT MARBURG, 11, Biegenstrasse, Marburg-Lahn, Germany.
THE MCGILL UNIVERSITY, Montreal.
ARCHÄOLOGISCHES INSTITUT DER DEUTSCHEN UNIVERSITÄT, Prague.
THE UNIVERSITY OF READING.
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W. Miller. M.A.	Elected 1926.
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Miss W. Lamb, M.A.	Hon. Keeper, Greek and Roman Department, Fitzwilliam Museum, Cambridge. Student 1920—1930. Elected 1931.

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Montague R. James. O.M., Litt.D.	Provost of Eton. Late Director of the Fitzwilliam Museum. Admitted (for work in Cyprus) 1887—88, with grant of £100 from the University, Cambridge.
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[1] * Before a name signifies "deceased." † Signifies "died on Active Service." For the war-service, military and otherwise, rendered by Students of the School, see Vol. XXIII, p. viii.

* Deceased. † Died of wounds, October 22nd, 1915.

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G. C. Richards. M.A.	Late Fellow of Hertford College. Late Canon of Durham and Professor of Greek in the University of Durham. Admitted as Craven University Fellow, 1889—90. Re-admitted 1890—91.
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J. F. R. Stainer. M.A., B.C.L.	Magdalen College, Oxford. Admitted 1889—90.
*R.A.H.Bickford-Smith. M.A., F.S.A.	Trinity College, Cambridge. Admitted 1889—90.
*A. G. Bather. M.A.	Late Fellow of King's College, Cambridge. Late Assistant Master at Winchester College. Admitted 1889—90. Re-admitted 1891—92, on appointment to the Cambridge Studentship; 1892—93 as Prendergast Greek Student; and again, 1893—94, as Cambridge Student.
E. E. Sikes. M.A.	Fellow and Tutor of St. John's College, Cambridge. Appointed to Cambridge Studentship, 1890—91.
J. G. Milne. D.Litt.	Corpus Christi College, Oxford. Late Assistant Secretary in the Board of Education. Appointed to Oxford Studentship, 1890—91.
Sir H. Stuart Jones. D.Litt., F.B.A.	Fellow and formerly Tutor of Trinity College, Oxford. Principal of the University College of Wales. Late Camden Professor of Ancient History in the University of Oxford. Formerly Director of the British School at Rome. Admitted as Craven University Fellow, 1890—91. Re-admitted 1892—93.
Miss Eugénie Sellers (Mrs. S. Arthur Strong). Litt.D. (Manchester), LL.D., F.S.A.	Life Fellow of Girton College, Cambridge. Late Assistant Director of the British School at Rome. Formerly Keeper of the Duke of Devonshire's Collections. Admitted 1890—91.
F. Brayne Baker. M.A.	Sometime Scholar of Christ's College, Cambridge. Assistant Master at Malvern College. Admitted 1891—92.
C. C. Inge. M.A.	Magdalen College, Oxford. Vicar of St. Giles', Oxford. Appointed 1891—92 to the Oxford Studentship.
E. F. Benson. B.A.	King's College, Cambridge. Admitted 1891—92, with grant of £100 from the Worts Fund at Cambridge; 1892—93 on appointment to the Cambridge Studentship; 1893—94 as Craven Student; and 1894—95 as Prendergast Student.
J. G. Piddington. B.A. (J. G. Smith).	Magdalen College, Oxford. Admitted 1891—92. Re-admitted 1895—96.
V. W. Yorke. M.A.	Late Fellow of King's College, Cambridge. Hon. Treasurer of the School. Admitted 1892—93. Re-admitted 1893—94.

* Deceased.

J. L. Myres. D.Sc., M.A.	Wykeham Professor of Ancient History in the University of Oxford. Formerly Fellow of Magdalen College, Oxford. Student and Tutor of Christ Church. University Lecturer in Classical Archaeology. Gladstone Professor of Greek in the University of Liverpool. Admitted 1892—93 as Craven Fellow. Re-admitted 1893—94 and 1894—95. Hon. Student of the School.
R. J. G. Mayor. M.A., C.B.	Late Fellow of King's College, Cambridge. Assistant Secretary in the Board of Education. Admitted 1892—93.
R. C. Bosanquet. M.A.	Trinity College, Cambridge. Late Professor of Classical Archaeology in the University of Liverpool. Assistant Director of the School, 1899—1900. Director 1900—1906. Admitted 1892—93. Re-admitted 1894—95. Re-admitted as Craven University Student 1895—96 and 1896—97.
Sir J. M. Cheetham. M.A., K.C.M.G.	Christ Church, Oxford. Late H.M. Envoy Extraordinary and Minister Plenipotentiary at Copenhagen. Admitted (Oxford Studentship) 1892—93.
E. R. Bevan. D.Litt., LL.D.	New College, Oxford. Admitted 1893—94.
A. F. Findlay. M.A.	Sent out as holder of Brown-Downie Fellowship by the United Presbyterian Church, Divinity Hall, Edinburgh. Admitted 1894—95.
J. G. Duncan. M.A., B.D.	Sent out from Aberdeen by the Church of Scotland. Minister of Kirkmichael, Ballindalloch, N.B. Admitted 1894—95.
J. E. Brooks. M.A.	St. Peter's College, Cambridge. Admitted 1894—95. Re-admitted as Associate 1896—97.
*H. Awdry. M.A.	New College, Oxford. Assistant Master at Wellington College. Admitted 1894—95.
Duncan Mackenzie. M.A. (Edin.), Ph.D. (Vienna).	Universities of Edinburgh and Vienna. Carnegie Fellow in History at the University of Edinburgh. Archaeological Curator at Knossos 1926—29. Admitted 1895—96. Re-admitted 1896—97, 1897—98 and 1898—99.
Archibald Paterson.	University of Edinburgh. Admitted 1895—96.
C. R. Rowland Clark.	Student of the Royal Academy. Appointed 1895—96, and re-appointed 1896—97, by the Managing Committee to an Architectural Studentship.
C. C. Edgar. B.A.	Oriel College, Oxford. Late Secretary-General of the Egyptian Service of Antiquities. Admitted 1895—96, and re-admitted 1896—97 (as Craven University Fellow), 1897—98 and 1898—99.
F. R. Earp. M.A.	Late Fellow of King's College, Cambridge. Admitted 1896—97.
*F. A. C. Morrison. M.A.	Jesus College, Cambridge. Admitted (as Prendergast Greek Student) 1896—97.
H. H. West. M.A.	Formerly of Trinity College, Cambridge. Admitted 1896—97.
*Miss C. A. Hutton.	Girton College, Cambridge. Hon. Secretary of the Society for the Promotion of Hellenic Studies. Joint Editor of the *Annual*, 1906—26. Admitted 1896—97.

* Deceased.

J. G. C. Anderson. M.A.	Camden Professor of Ancient History in the University of Oxford. Formerly Fellow of Lincoln College. Student, Tutor, and sometime Senior Censor of Christ Church, Oxford. Admitted (as Craven University Fellow) 1896—97.
J. W. Crowfoot. M.A.	Brasenose College, Oxford. Director of the British School of Archaeology in Jerusalem. Late Director of Education, Sudan Government. Admitted, on appointment to the Oxford Studentship, 1896—97. Re-admitted 1897—98.
W. W. Reid. B.D.	Universities of Aberdeen and Edinburgh. Minister of the Church of Scotland, Dumbarton, N.B. Admitted, as holder of Blackie Travelling Scholarship, 1896—97.
A. E. Henderson. F.S.A., F.R.I.B.A.	Owen Jones Student of Royal Institute of British Architects, 1897—98. Admitted 1897—98. Re-admitted 1898—99, 1901—2, and 1902—3.
W. A. Curtis. D.Litt., D.D. (Edin.).	Heriot Scholar of Edinburgh University. Regius Professor of Biblical Criticism and Biblical Antiquities in the University of Edinburgh. Formerly Professor of Systematic Theology in the University of Aberdeen. Admitted 1897—98.
A. J. Spilsbury. M.A.	Queen's College, Oxford. Head Master of Wakefield Grammar School. Formerly Senior Classical Master, City of London School. Admitted 1897—98, on appointment to the Oxford Studentship.
E. B. Hoare.	Magdalen College, Oxford. Admitted 1897—98, as Architectural Student.
J. C. Lawson. M.A.	Fellow, Tutor and Lecturer of Pembroke College, Cambridge. Admitted as Craven University Student, 1898—99. Re-admitted 1899—1900.
C. D. Edmonds. M.A.	Emmanuel College, Cambridge. Assistant Master at Berkhampstead School. Formerly at Aldenham School and at Royal Naval College, Osborne. Admitted as Prendergast Student, 1898—99.
Sir John H. Marshall, Kt. C.I.E., Litt.D., F.S.A.	Scholar of King's College, Cambridge. Late Director-General of the Archaeological Survey of India. Admitted 1898—99. Re-admitted as Prendergast Student, 1900—1, Craven Student, 1901—2.
*Clement Gutch. M.A.	King's College, Cambridge. Lecturer at St. John's College, Cambridge. Admitted, 1898—99, on appointment to the Cambridge Studentship.
F. B. Welch. M.A.	Magdalen College, Oxford. British Representative on the Commission mixte de l'Organisation des Populations Gréco-Bulgare. Formerly Vice-Consul, Athens. Admitted as Craven University Fellow, 1898—99. Re-admitted 1899—1900.
T. D. Atkinson. F.R.I.B.A.	Surveyor to the Dean and Chapter of Ely, to the Dean and Chapter of Winchester, and to the Warden and Fellows of Winchester College. Admitted as Architectural Student, 1898—99.
J. K. Fotheringham. M.A., D.Litt.	Merton and Magdalen Colleges, Oxford. Formerly Fellow of Magdalen College, Oxford. Reader in Ancient History in the University of London. Assistant in the University Observatory, Oxford. Admitted on appointment to Oxford Studentship, 1898—99.

* Deceased.

Canon J. H. Hopkinson. M.A.	University College, Oxford. Organiser of Religious Education in the Diocese of Carlisle. Formerly Warden of Hulme Hall and Lecturer in Classical Archaeology, University of Manchester. Admitted as Craven University Fellow, 1899—1900 and 1900—1.
*Miss O. C. Köhler (Mrs. Charles Smith).	Girton College, Cambridge. Admitted 1899—1900.
D. Theodore Fyfe. F.R.I.B.A.	Surveyor to the Dean and Chapter of Chester. Master of the School of Architecture, Cambridge. Architectural Association Travelling Student, 1899. Admitted 1899—1900, on appointment to Architectural Studentship.
†K. T. Frost. M.A., F.R.G.S.	Brasenose College, Oxford. Lecturer at the Queen's University, Belfast. Admitted on appointment to the Oxford Studentship, 1900—1.
R. D. Wells. M.A., F.R.I.B.A	Trinity College, Cambridge. Admitted on appointment to the Architectural Studentship, 1900—1.
John Penoyre. M.A., C.B.E.	Keble College, Oxford. Secretary and Librarian to the Society for the Promotion of Hellenic Studies. Secretary to the British School at Athens, 1905—1919. Admitted 1900—1. Re-admitted 1906—7, 1907—8.
Marcus N. Tod. M.A., F.B.A., O.B.E.	Fellow and Senior Tutor of Oriel College, Oxford, and University Reader in Greek Epigraphy. Craven University Fellow. Assistant-Director of the School 1902—4. Admitted on appointment to "Senior Studentship," 1901—2. Honorary Student of the School.
*F. W. Hasluck. M.A.	Sometime Fellow of King's College, Cambridge. Assistant Director and Librarian of the School from 1906—1915. Admitted on appointment to Cambridge Studentship 1901—2. Re-admitted 1902—3, 1904—5, 1905—6. Honorary Student of the School.
C. Heaton Comyn. F.R.I.B.A.,M.R.San.I.	Admitted on appointment to the Architectural Studentship, 1901—2. Re-admitted 1903—4.
Miss H. L. Lorimer. M.A.	Girton College, Cambridge. Fellow of Somerville College. University Lecturer in Homeric Archaeology, Oxford. Admitted as Pfeiffer Travelling Student, 1901—2. Re-admitted 1910—11, 1921—22.
Baroness E. Rosenörn-Lehn.	Royal Holloway College, and University College, London. Admitted 1901—2.
A. P. Oppé. B.A.	New College, Oxford. Examiner in the Board of Education. Sometime Lecturer in Greek at St. Andrews University. Lecturer in Ancient History at Edinburgh University. Deputy Director and Secretary Victoria and Albert Museum. Admitted 1901—2.
W. L. H. Duckworth. M.D., Sc.D.	Fellow of Jesus College, Cambridge. University Lecturer in Physical Anthropology. Admitted 1902—3.
C. T. Currelly. M.A., F.R.G.S., F.R.S.C.	Victoria College, Toronto. Director of the Royal Ontario Museum. Formerly Assistant to Professor Flinders Petrie, under the Egypt Exploration Fund. Admitted 1902—3. Re-admitted 1903—4.
R. McG. Dawkins. M.A.	Hon. Fellow of Emmanuel College, Cambridge. Bywater Professor of Byzantine and Modern Greek Language and Literature in the University of Oxford. Director of the School from 1906—14. School Student. Admitted as Craven Student, 1902—3. Re-admitted 1903—4, 1904—5, 1905—6.

* Deceased. † Killed in action, September 4th, 1914.

E. S. Forster. M.A., F.S.A., M.B.E.	Bishop Frazer's Scholar, Oriel College, Oxford. Professor of Greek in the University of Sheffield. Formerly Assistant Lecturer in the University College of N. Wales. Admitted on appointment to the Oxford Studentship, 1902—3. Re-admitted 1903—4, with grants from the Craven Fund and Oriel College.
A. J. B. Wace. M.A.	Formerly Fellow of Pembroke College, Cambridge. Laurence Professor of Classical Archaeology in the University of Cambridge. Late Deputy Keeper in the Victoria and Albert Museum. Sometime Lecturer in Ancient History and Archaeology in the University of St. Andrews. Norton Lecturer of the American Archaeological Institute, 1923—24. Prendergast Student. Craven Student. Admitted 1902—3. Re-admitted 1903—4, 1904—12. Director of the School, 1914—23. Honorary Student of the School.
†E. W. Webster. M.A.	Fellow of Wadham College, Oxford. Taylorian Scholar in German, 1901. John Locke Scholar in Mental Philosophy 1904. Admitted 1902—3.
J. B. Fulton. A.R.I.B.A.	Soane Student. Admitted 1902—3.
E. F. Reynolds.	Admitted 1902—3.
M. Cary. D.Litt. (M. O. B. Caspari.)	Late Scholar of Corpus Christi College, Oxford. Reader in Ancient History in the University of London. University Scholar in German. Admitted 1903—4.
J. L. Stokes. B.A.	Formerly Scholar of Pembroke College, Cambridge. Librarian of Charterhouse School since 1905. Admitted (as Holder of the Prior Scholarship from Pembroke College), 1903—4.
Miss M. K. Welsh (Mrs. A. M. Daniel).	Newnham College, Cambridge. Holder of the Marion Kennedy Studentship. Admitted 1903—4.
†G. Dickins. M.A.	Fellow of St. John's College, Oxford. Craven University Fellow. Admitted 1904—5, 1905—6. Re-admitted as School Student, 1906—7. Re-admitted 1907—8, 1908—9, 1912—13.
C. C. T. Doll. M.A.	Trinity College, Cambridge. Superintending Architect at the excavations at Knossos 1905—12. Admitted 1904—5.
C. H. Hawes. M.A.	Trinity College, Cambridge. Assistant Director, Boston Museum of Fine Arts. Late Professor of Anthropology, Dartmouth College, U.S.A. Admitted 1904—5, 1908—9.
W. A. Kirkwood. M.A. (Harvard), Ph.D. (Harvard).	University College, Toronto. Registrar of Trinity College, Toronto. Admitted 1904—5.
H. J. W. Tillyard. M.A., D.Litt. (Edinburgh).	Caius College, Cambridge. Professor of Greek at University College, Cardiff. Late Reader in Russian, University of Birmingham. Formerly Lecturer in Greek, University of Edinburgh. Admitted 1904—5 as Assistant Librarian. Re-admitted 1905—6 (on appointment to Studentship), 1906—7, 1908—9. Re-admitted 1912—13.
Miss G. M. A. Richter. Litt.D.	Girton College, Cambridge. Keeper of the Department of Classical Antiquities, Metropolitan Museum of Art, New York. Admitted 1904—5.

† Killed in action, April 9th, 1917. † Died of wounds, July 17th, 1916.

J. P. Droop. M.A.	Trinity College, Cambridge. Professor of Classical Archaeology in the University of Liverpool. Late Assistant to Dr. Stein in the arrangement of his collections. Admitted 1905—6, 1906—7 (Prendergast Student), 1907—8 (School Student), 1908—9, 1910—11, 1912—13, 1913—14. Re-admitted 1921—22.
Miss M. Hamilton. M.A., D.Litt. (Mrs. L. Caskey).	University of St. Andrews. Holder of a Research Fellowship under the Carnegie Trust. Admitted 1905—6, 1906—7.
A. C. B. Brown. M.A.	Scholar of New College, Oxford. Fereday Fellow of St. John's College, Oxford. Formerly Assistant Lecturer in Classics, Manchester University. Assistant Master at Marlborough College. Admitted 1905—6.
F. Orr.	Admitted 1905—6.
R. Traquair. F.R.I.B.A.	Admitted 1905—6 (on appointment to an Architectural Studentship). Professor of Architecture, McGill University, Montreal. Re-admitted 1906—7, as Student of the Byzantine Fund.
Miss E. B. Abrahams. M.A. (Mrs. Culley).	Bedford College, London. Joint Editor of the *Annual*, 1925—1932. Admitted 1905—6.
W. J. Farrell. M.A., M.C.	Late Fellow of Jesus College, Cambridge. Education Officer under Palestine Administration. Admitted 1906—7, 1907—8, 1908—9, 1909—10.
Walter S. George.	Travelling Student in Architecture of the Royal College of Art. Soane Medallist of Royal Institute of British Architects. Late Assistant to Architects of Imperial Delhi. Admitted 1906—7. Re-admitted 1908—9, 1909—10, as student of the Byzantine Research Fund. Re-admitted 1912—13.
*T. E. Peet. M.A.	Queen's College, Oxford. Officer of Egypt Exploration Society and Professor of Egyptology in the University of Oxford. Formerly Professor of Egyptology in the University of Liverpool. Admitted as Craven Fellow, 1906—7, and as Pelham Student in the British School at Rome 1908—9.
A. M. Woodward. M.A.	Late Classical Demy of Magdalen College, Oxford. Lecturer in charge of the Department of Ancient History in the University of Sheffield. Director of the School, 1923—29. Assistant Director, 1909–10, 1922–23. Admitted 1906—7, 1907—8, 1908—9.
W. M. Calder. LL.D.	Christ Church, Oxford. Professor of Greek in the University of Edinburgh. Formerly Wilson Travelling Fellow, Aberdeen University. Research Student, Brasenose College, Oxford. Admitted 1907—8.
W. Harvey.	Gold Medallist and Travelling Student of the Royal Academy. Admitted 1907—8.
H. Pirie-Gordon. M.A., D.S.C.	Magdalen College, Oxford. Admitted 1907—8.
M. S. Thompson. M.A., O.B.E.	Corpus Christi College, Oxford. Holder of Chas. Oldham Scholarship. Craven Fellow. Admitted 1907—8, 1908—9, 1909—10, 1910—11, 1911—12. Hon. Secretary of the School, 1919—27.
A. C. Sheepshanks. B.A.	Trinity College, Cambridge. Assistant Master at Eton. Admitted 1907—8.
N. Whatley. M.A.	Late Fellow of Hertford College, Oxford. Headmaster of Clifton College. Admitted 1907—8.

* Deceased.

†G. L. Cheesman. M.A.	Fellow and Lecturer of New College, Oxford. Admitted 1908—9.
A. W. Gomme. B.A.	Trinity College, Cambridge. Lecturer in Greek History and Archaeology, University of Glasgow. Previously Assistant Lecturer in Classics, Liverpool University. Prendergast Student. Admitted 1908—9, 1919—20, 1922—23.
L. B. Budden. M.A., A.R.I.B.A.	Professor in the School of Architecture of the University of Liverpool. Admitted 1909—10.
S. W. Grose. M.A.	Christ's College, Cambridge. Fellow and Senior Tutor of Christ's College, Cambridge. From 1914, cataloguing McClean Collection of Greek Coins in the Fitzwilliam Museum. School Student. Admitted 1909—10.
H. A. Ormerod. M.A., M.C.	Queen's College, Oxford. Rathbone Professor of Ancient History in the University of Liverpool. Late Professor of Classics in the University of Leeds. Admitted 1909—10, 1910—11.
H. H. Jewell.	Royal Academy Gold Medallist. Admitted 1909—10.
W. R. Halliday. M.A., LL.D. (Glas.)	New College, Oxford. Principal of King's College, University of London. Late Rathbone Professor of Ancient History in the University of Liverpool. Craven Fellow. Admitted 1910—11. Re-admitted 1912—13.
Miss D. Lamb. M.B.E. (Lady Brooke).	Newnham College, Cambridge. Admitted 1910—11. Re-admitted 1913—14.
Miss L. E. Tennant (Mrs. F. J. Watson Taylor).	Admitted 1910—11.
E. S. G. Robinson. M.A.	Christ Church, Oxford. Assistant Keeper in the Coin and Medal Department, British Museum. School Student. Admitted 1910—11.
L. B. Tillard. B.A.	St. John's College, Cambridge. Admitted 1910—11.
A. J. Toynbee. B.A.	Sometime Fellow of Balliol College, Oxford. Late Koraes Professor of Byzantine and Modern Greek Language, Literature and History at King's College, University of London. Admitted 1911—12. Re-admitted 1920—21.
R. S. Darbishire. B.A.	Balliol College, Oxford. Admitted 1911—12.
Miss M. M. Hardie. M.A. (Mrs. F. W. Hasluck).	Newnham College, Cambridge. Admitted as School Student, 1911—12.
E. M. W. Tillyard. M.A., O.B.E.	Late Fellow of Jesus College, Cambridge. Admitted 1911—12.
M. L. W. Laistner. M.A.	Jesus College, Cambridge. Professor of Ancient History at Cornell University, Ithaca, N.Y. Late Reader in Ancient History in the University of London. Craven Student. Admitted 1912—13. Re-admitted 1913—14 as School Student.
S. Casson. M.A.	Lincoln College, Oxford, and Senior Scholar of St. John's College. Fellow of New College. University Lecturer in Classical Archaeology. Assistant Director of the School, 1919—1922. School Student. Admitted 1912—13. Re-admitted 1913—14.
R. S. Lambert.	Repton School. In charge of the Adult Education Section of The British Broadcasting Corporation.

† Killed in action, August 10th, 1915.

Gordon Leith.	Holder of Herbert Baker Studentship. Admitted 1912—13.
C. A. Scutt. M.A.	Clare College, Cambridge. Professor of Greek in the University of Melbourne, Victoria. Prendergast Student of the University of Cambridge. Admitted 1912—13. Re-admitted 1913—14.
†R. M. Heath. B.A.	Oriel College, Oxford. Craven Fellow. Admitted 1913—14.
J. Boxwell. B.A.	Scholar of Trinity College, Dublin. Travelling Scholar of Union of South Africa. Admitted 1913—14.
Miss M. N. L. Taylor (Mrs. H. C. Bradshaw).	Newnham College, Cambridge. Admitted 1913—14.
J. Arnott Hamilton. M.A.	University of Edinburgh. Holder of the Blackie Travelling Scholarship. Admitted 1913—14.
Miss E. Radford.	Admitted 1913—14.
Miss Agnes Conway. M.B.E.	Admitted 1913—14.
Rev. W. A. Wigram. D.D.	Admitted 1913—14. Chaplain to British Legation, Athens, 1923—26.
†C. B. Moss-Blundell. B.A.	New College, Oxford. School Student elect 1914—15.
H. Collingham. B.A.	Queens' College, Cambridge. Assistant Master at St. Olave's, Southwark. Craven Student. Admitted 1919—20.
M. Tierney. B.A.	University of Ireland. Professor of Ancient History, University College, Dublin. Admitted 1919—20.
A. W. Lawrence. B.A.	New College, Oxford. Laurence Reader in Classics in the University of Cambridge. Admitted with grant from the Craven Fund, 1919—20. Re-admitted 1921—22. Re-admitted as Craven Fellow, 1924—25.
*J. B. Hutton. M.A.	Lecturer in Greek History and Archaeology at University of Glasgow. Admitted with grant from the Carnegie Trustees, 1920—21.
F. L. Lucas. M.A.	Trinity College, Cambridge. Fellow and Lecturer of King's College. School Student. Admitted 1920—21.
B. Ashmole. M.A., M.C.	Hertford College, Oxford. Late Director of the British School at Rome. Yates Professor in the University of London. Craven Fellow. Admitted 1920—21, 1921—22.
H. T. Wade-Gery. M.A.	New College, Oxford. Fellow and Tutor of Wadham College. Admitted 1920—21, 1921—22, 1922—23, 1932—33.
J. J. E. Hondius. Litt.Class.Doc.	University of Utrecht, Holland. Admitted as Foreign Student 1920—21.
C. A. Boethius. Dr.Phil.	University of Upsala, Sweden. Director of Swedish Arch. Inst., Rome. Admitted as Foreign Student 1920—21, 1921—22.
Miss L. Chandler. B.A.	University of Sheffield. Classical Mistress at the Hornsey High School. First Holder of Gustav Sachs Memorial Studentship. Admitted 1920—21.
Miss M. A. B. Herford. M.A. (Mrs. G. E. K. Braunholtz).	University of Manchester and Somerville College, Oxford. Formerly Lecturer in Classical Archaeology and Assistant Lecturer in Classics, University of Manchester. Admitted 1920—21.

† Killed in action, September 16th, 1916.
† Killed in action, September 26th, 1915.

* Deceased.

Miss W. Lamb. M.A.	Newnham College, Cambridge. Hon. Keeper of the Greek and Roman Department, Fitzwilliam Museum. Admitted 1920—21. Re-admitted 1921—22, 1922—23, 1923—24, 1924—25, 1927—28, 1928—29, 1929—30, 1930—31. Hon. Student of the School.
M. A. Hondius-Van Haeften (Mrs. J. J. E. Hondius).	University of Utrecht, Holland. Admitted as Foreign Student, 1920—21.
W. A. Heurtley. B.A., O.B.E.	Caius College, Cambridge. Diploma of Archaeology, Oxford. Librarian, Dept. of Antiquities, Jerusalem. Assistant Director and Librarian of the School 1923—1932. School Student. Admitted 1921—22, 1922—23.
R. W. Hutchinson. B.A.	St. John's College, Cambridge. Craven Student. Admitted 1921—22. Re-admitted 1930—31.
J. E. Scott. M.A.	Emmanuel College, Cambridge. Fellow and Lecturer of Caius College, Cambridge. Admitted 1921—22.
E. Smith. Ph.D.	University of Christiania, Norway. Lecturer in Classics. Admitted as Foreign Student, 1921—22.
*A. Smith (Mrs. E. Smith).	University of Christiania, Norway. Admitted as Foreign Student, 1921—22.
E. Kjellberg. Ph.D.	University of Lund, Sweden. Assistant in the National Museum, Stockholm. Admitted as Foreign Student, 1921—22.
J. Waldis. Dr.Phil.	University of Zurich, Switzerland. Professor at the Gymnasium, Lucerne. Admitted as Foreign Student, 1921—22.
G. Snijder. Ph.D.	University of Utrecht, Holland. Admitted as Foreign Student with Travelling Fellowship from his University, 1921—22.
J. Bell. M.A.	Fellow of Queen's College, Oxford. Admitted 1922—23.
*S. S. Clarke. B.A.	Balliol College, Oxford. Fellow of Exeter College. Craven Fellow. Admitted 1922—23, 1923—24.
B. L. Hallward. B.A.	King's College, Cambridge. Fellow of Peterhouse. University Lecturer in Classics. Admitted 1922—23 as School Student.
D. C. Macgregor. M.A.	Fellow of Balliol College, Oxford. Admitted 1922—23.
Miss J. Pybus (Mrs. A. M. Woodward).	Newnham College, Cambridge. Late Senior Classical Mistress, Newcastle Central High School. Admitted 1922—23.
A. G. Russell. B.A.	University of Liverpool. Classical Master at the Liverpool Institute. Admitted as Sachs Student, 1922—23.
C. T. Seltman. M.A.	Fellow of Queens' College, Cambridge. University Lecturer in Classics. Secretary of the Cambridge Philological Society. Norton Lecturer of the American Archaeological Institute, 1929–30. Martin Lecturer in the University of Oberlin, 1932. Diploma of Archaeology, Cambridge. Winter Warr Scholar. Prendergast Student. Admitted 1922–23.
O. J. Todd. Ph.D. (Harv.).	Associate Professor of Classics in the University of British Columbia. Admitted 1922—23.
Miss J. Webb. B.A.	University of Melbourne. Admitted 1922—23.
W. H. Alexander. M.A. (Tor.), Ph.D. (Calif.).	Professor of Classics in the University of Alberta, Canada. Admitted 1923—24. Re-admitted 1925—26.

* Deceased.

Miss C. Brönsted.	University of Copenhagen. Admitted as Foreign Student 1923—24.
W. B. C. Buchanan. B.A.	University of Edinburgh. Admitted as holder of Blackie Travelling Scholarship, 1923—24.
C. W. M. Cox. B.A.	Balliol College, Oxford. Fellow of New College, Oxford. Admitted as Craven Fellow, 1923—24.
W. L. Cuttle. B.A.	Emmanuel College, Cambridge. Fellow and Tutor of Downing College, Cambridge. Admitted as Craven Student, 1923—1924. Re-admitted 1924—25 as School Student. Re-admitted 1925—26.
C. Hignett. M.A.	Fellow of Hertford College, Oxford. Admitted 1923—24.
Miss M. B. Hobling. B.A.	Somerville College, Oxford. Classical Mistress at the Perse Girls' School, Cambridge. Admitted as School Student, 1923—24. Re-admitted 1924—25 as holder of the Mary Ewart Scholarship.
Miss U. D. Hunt. M.A.	Bedford College, London. Classical Mistress, Tiffin Girls' School, Kingston-on-Thames. Formerly Lecturer at Bedford College for Women. Admitted 1923—24.
H. H. Keen. B.A.	Balliol College, Oxford. Admitted 1923—24.
M. B. C. Tait. B.A.	Balliol College, Oxford. Admitted 1923—24.
Miss E. Tankard. B.A.	University of Liverpool. Assistant-Secretary to Institute of Archaeology, Liverpool. Keeper of the Department of Archaeology, Liverpool Museum. Admitted with grants from Holt Educational Trust and the School, 1923—24. Re-admitted 1924—25, 1925—26.
Miss A. Wentzel.	University of Copenhagen. Admitted as Foreign Student, 1923—24.
R. P. Austin. M.A.	University College, Reading. Assistant Lecturer in Classics, University of Birmingham. Admitted 1924—25 with grants from University College, Reading and the Cornwall County Education Committee. Re-admitted as holder of a Postgraduate Travelling Studentship from University of London, 1925—26. Re-admitted 1927—28, 1930—31, 1932—33.
H. G. G. Payne. B.A.	Christ Church, Oxford. Director of the School. Admitted as holder of Travelling Scholarship in Mediterranean Archaeology, 1924—25, 1925—26. Re-admitted 1926—27. First holder of the Macmillan Studentship, 1928—29.
A. M. Farrer.	Balliol College, Oxford. Admitted as holder of the Clarke Memorial Exhibition, Easter, 1925.
J. H. Iliffe. B.A.	Emmanuel College, Cambridge. Director of the Museum, Jerusalem. Late lecturer at Toronto University. Admitted as Craven Student, 1924—25.
M. A. Sisson. A.R.I.B.A.	Admitted as Jarvis Student in Architecture at the British School at Rome, 1924—25. Re-admitted 1925—26.
B. I. Lawrence. B.A. (Mrs. A. W. Lawrence.)	Somerville College, Oxford. Admitted 1924—25.
Miss V. Whitfield. B.A. (Mrs. H. T. Wade-Gery.)	Somerville College, Oxford. Admitted as holder of a Gilchrist Scholarship, 1924—25. Re-admitted as holder of the Bryce Studentship, a Fellowship from Lady Margaret Hall, and a grant from the Ireland Fund, 1927—28. Re-admitted 1932—33.

H. Frankfort. Hist. Doct. (Leiden), M.A. (London).	Universities of Amsterdam and London. Field Director of the Iraq Expedition of the Oriental Institute of the University of Chicago. Admitted 1924—25.
H. A. Frankfort. Lit. n. Cand. (Mrs. H. Frankfort.)	University of Amsterdam. Admitted 1924—25.
P. Dikaios.	Admitted on Nomination of the Government of Cyprus, 1924—25.
H. Box. M.A.	St. John's College, Oxford. Lecturer in Classics at University College, Hull. Admitted as School Student, 1925—26.
G. A. D. Tait. B.A.	St. John's College, Cambridge. Assistant Master at Eton College. Admitted with a Scholarship from his College, 1925—26.
O. Davies. B.A.	Exeter College, Oxford. Lecturer in Archaeology and Ancient History, Queen's University, Belfast. Admitted as holder of the Clarke Memorial Exhibition, Easter, 1926. Re-admitted as Craven Fellow, 1927—28, 1928—29, 1929—30.
Miss E. Scott.	Oxford Home Student. Admitted 1925—26.
Miss J. Toynbee. B.A.	Newnham College, Cambridge. Admitted as Student of the British School at Rome, 1926.
R. A. Cordingley. A.R.I.B.A.	Admitted as Student in Architecture of the British School at Rome, 1925—26.
Miss K. M. T. Chrimes. B.A.	St. Hugh's Hall, Oxford. Admitted as Gilchrist Student of the British School at Rome, 1925—26.
Miss N. M. Holley.	Newnham College, Cambridge. Admitted as Student of the British School at Rome, 1925—26.
C. G. Hardie.	Balliol College, Oxford. Admitted as holder of the Clarke Memorial Exhibition, Easter, 1927.
*J. T. Hawdon. B.A.	University of Birmingham. Admitted as Sachs Student, 1926—27.
*Miss A. Masom. B.A.	University of London. Admitted 1926—27.
P. J. Dixon. B.A.	Late Fellow of Pembroke College, Cambridge. H.M. Diplomatic Service. Admitted as Craven Student 1927—28.
A. L. McMullen. B.A.	St. John's College, Cambridge. Admitted 1927—28.
J. D. S. Pendlebury. B.A.	Pembroke College, Cambridge. Director of Excavations at Tell el-'Amarnah, Egyptian Exploration Society. Curator at Knossos. Admitted as School Student, 1927—28. Re-admitted 1928—29. Macmillan Student, 1929.
C. A. Ralegh Radford. B.A., F.S.A., F.R. Hist. S.	Exeter College, Oxford. Inspector of Ancient Monuments for Wales, H.M. Office of Works. Admitted 1927—28. Re-admitted 1928—29.
W. D. Woodhead M.A. (Oxon).	Professor of Greek, McGill University, Montreal. Admitted 1927—28.
Miss S. Benton. M.A., B. Litt.	Girton College, Cambridge. Admitted 1927—28. Re-admitted 1930—31, 1931—32, 1932—33.
Miss M. Rodger. B.A.	Somerville College, Oxford. Admitted as School Student, 1927—28.

* Deceased.

Miss H. White (Mrs. J. D. S. Pendlebury).	Newnham College, Cambridge. Admitted 1927—28. Re-admitted 1928—29.
I. Gallie.	Exeter College, Oxford. Admitted as holder of the Clarke Memorial Studentship, 1928.
W. G. Hardy. M.A.	Associate Professor of Classics, University of Alberta. Admitted 1928.
Mrs. Hardy.	Admitted 1928.
Miss M. Hartley. B.A.	Girton College, Cambridge. Classical Tutor at Somerville College, Oxford. Formerly Assistant Lecturer in Classics, University of Liverpool. Admitted 1928—29. Re-admitted with grants from School Committee, Cambridge Craven Fund and Girton College, 1929—30, 1930—31.
H. W. Jacobs. B.A.	Wadham College, Oxford. Admitted as a Student of the School at Rome, 1928. Re-admitted 1928—29.
Miss M. I. Turnbull, M.A.	Lecturer in Classics, University of Otago, Dunedin, New Zealand. Admitted 1928.
J. E. Lloyd. B.A.	King's College, Cambridge. Admitted as School Student, 1928—29.
Prof. T. Le Roux.	University of Cape Town. Admitted 1928—29.
W. A. Laidlaw. M.A.	Trinity College, Dublin. Formerly Lecturer in the University of Western Australia. Lecturer in the University of St. Andrews. Admitted 1928—29.
Miss C. Barratt. M.A.	Somerville College, Oxford. Admitted 1928—29.
Miss A. E. Lindsell.	Newnham College, Cambridge. Warden of Bedford College House, London. Admitted 1928—29. Re-admitted 1930—31.
Miss A. Nance.	Slade School. Admitted 1928—29.
W. K. C. Guthrie. B.A.	Trinity College, Cambridge. Craven Student. Admitted 1928—29.
G. D. Hake. M.A., F.R.I.B.A.	Headmaster of the School of Architecture of the Royal West of England Academy, Bristol. Admitted as first holder of the R.I.B.A. Athens Bursary, 1929—30.
N. G. L. Hammond. M.A.	Gonville and Caius College, Cambridge. Fellow and Tutor of Clare College, Cambridge. Admitted as first holder of the Sandys Studentship, 1929—30.
Miss M. L. Macdonnell. M.A.	Lecturer in Classics at Queen's University, Kingston, Canada. Admitted 1929—30.
C. M. Robertson.	Admitted 1929—30.
Miss O. M. Rowe.	Somerville College, Oxford. Admitted as School Student, 1929—30.
T. C. Skeat. B.A.	Christ's College, Cambridge. Joint Editor of the *Annual*. Assistant Keeper in the Department of MSS., British Museum. Admitted as holder of Sachs Studentship, 1929—30. Re-admitted as Walston Student, 1930—31.
C. R. Wason. B.A.	Gonville and Caius College, Cambridge. Lecturer in Classics, Edinburgh University. Formerly Lecturer at Toronto University. Admitted as first holder of Walston Scholarship, 1929—30.
Miss J. E. Matthews. M.A.	University of Toronto. Admitted 1930—31.
Miss M. E. Hirst. M.A.	Newnham College, Cambridge. Lecturer in Classics, Birmingham University. Admitted 1930—31.

Miss B. Wilkinson. B.A.	St. Hilda's College, Oxford. Admitted 1930—31. Re-admitted as School student 1931—32.
R. D. Barnett. M.A.	Corpus Christi College, Cambridge. Assistant Keeper in the Department of Egyptian and Assyrian Antiquities, British Museum. Admitted as School Student, 1930—31. Re-admitted 1931—32.
J. K. Brock. M.A.	Trinity College, Cambridge. Admitted 1930—31. Re-admitted 1931—32, 1932—1933.
R. J. Heald Jenkins. B.A.	Emmanuel College, Cambridge. Prendergast Student. Admitted 1930—31. Re-admitted 1931—32. Fellow of Emmanuel, 1932—33 (Macmillan Student).
T. Burton Brown.	Emmanuel College, Cambridge. Admitted 1930—31. Re-admitted 1931—32.
Capt. H. R. Walker.	King's College, Cambridge. Admitted 1930—31.
R. F. Cole. B.Arch., F.R.I.B.A.	Liverpool University School of Architecture. Admitted 1931—32, as holder of R.I.B.A. Bursary.
C. C. Cremin. B.A.	University College, Cork. Travelling student, National University of Ireland. Admitted 1931—32.
G. T. Griffith. M.A.	Fellow of Gonville and Caius College, Cambridge. Admitted 1931—32.
H. Megaw. B.A.	Peterhouse, Cambridge. Walston Student. Admitted 1931—32. Re-admitted 1932—33.
R. L. Roberts.	Exeter College, Oxford. Clarke Student. Admitted 1931—32.
Miss R. D. Smith. B.A.	St. Hilda's College, Oxford. Admitted 1931—32.
R. E. Wycherley. B.A.	Queens' College, Cambridge. Admitted 1931—32.
Miss M. E. K. Burnett. M.A.	University of Edinburgh. Admitted 1932—33.
K. E. Nelson. B.A.	St. John's College, Cambridge. Admitted 1932—33.
E. A. Lane. B.A.	St. John's College, Cambridge. Admitted as School Student 1932—33.
G. M. Young. C.I.E., M.A.	King's College, Cambridge. Secretary to the Government of India, Army Department, 1926—32. Admitted 1932—33.
R. M. Cook. B.A.	Clare College, Cambridge. Admitted as Walston Student, 1932—33.
R. H. Bulmer. B.A.	King's College, Cambridge. Admitted 1932—33.
H. Casson. B.A.	St. John's College, Cambridge. Admitted 1932—33.
Miss M. H. Hartley. M.A.	Victoria University of Manchester. Admitted 1932—33.
Miss C. Edgar. B.A.	Somerville College, Oxford. Admitted 1932—33.
W. J. Smith. M.C., F.R.I.B.A.	Glasgow School of Architecture. Admitted as holder of the R.I.B.A. Athens Bursary 1932—33.
E. J. A. Kenny. B.A.	Trinity College, Cambridge. Admitted 1932—33.
P. H. Jones.	Balliol College, Oxford. Admitted as Clarke Exhibitioner 1932—33.
C. G. Bird. B.A.	Corpus Christi College, Cambridge. Admitted 1932—33.

ASSOCIATES OF THE SCHOOL.

*Rev. A. H. Cruikshank.	Elected	1896.
Ambrose Poynter, Esq.	,,	1896.
J. E. Brooks, Esq.	,,	1896.
Miss Louisa Pesel	,,	1902.
J. F. Crace, Esq.	,,	1902.
Miss Mona Wilson.	,,	1903.
J. S. Carter, Esq.	,,	1903.
B. Townsend, Esq.	,,	1903.
A. M. Daniel, Esq.	,,	1903.
H. W. Allen, Esq.	,,	1906.
W. Miller, Esq.	,,	1906.
George Kennedy, Esq.	,,	1906.
A. E. Zimmern, Esq.	,,	1910.
Miss Negreponte.	,,	1912.
C. J. Ellingham, Esq.	,,	1913.
Capt. H. M. Greaves, R.A.	,,	1913.
Shirley Atchley, Δ.Γρ.	,,	1920.
Miss C. A. Hutton	,,	1926.
Rev. W. A. Wigram	,,	1926.
Prof. H. J. W. Tillyard	,,	1929.
Miss G. R. Levy	,,	1930.
D. Dickson, Esq.	,,	1930.
Miss J. Michalopulo	,,	1932.

RULES AND REGULATIONS

OF THE

BRITISH SCHOOL AT ATHENS.

OBJECTS OF THE SCHOOL.

I. The first aim of the School shall be to promote the study of Greek archaeology in all its departments. Among these shall be (i) the study of Greek art and architecture in their remains of every period; (ii) the study of inscriptions; (iii) the exploration of ancient sites; (iv) the tracing of ancient roads and routes of traffic.

II. Besides being a School of Archaeology, it shall be also, in the most comprehensive sense, a School of Classical Studies. Every period of the Greek language and literature, from the earliest age to the present day, shall be considered as coming within the province of the School.

III. The School shall also be a centre at which information can be obtained and books consulted by British travellers in Greece.

IV. For these purposes a Library shall be formed, and maintained, of archaeological and other suitable books, including maps, plans, and photographs.

THE SUBSCRIBERS.

V. The following shall be considered as Subscribers to the School :—

(1) Donors, other than Corporate Bodies, of £10 and upwards.
(2) Annual Subscribers of £1 and upwards during the period of their subscription.

VI. Subscribers of £2 annually or more, and Donors of £20 and upwards to the general funds of the School, shall receive a copy of the *Annual* free of charge.

Subscribers of £1 annually and Donors of £10 to the general funds shall be allowed to purchase the *Annual* at a reduced rate of £1. All Subscribers shall be entitled to receive a copy of the Annual Report and to use the Library and attend the public meetings of the School in Athens.

VII. A Corporate Body subscribing not less than £50 a year, for a term of years, shall, during that term, have the right to nominate a member of the Managing Committee.

VIII. A meeting of Subscribers shall be held in October of each year, at which each Subscriber shall have one vote. A subscribing Corporate Body may send a representative. At this meeting a report from the Managing Committee shall be presented, including a financial statement and selections from the reports of the Director and Students for the season. At this meeting shall also be annually elected or re-elected the Treasurer and the Secretary of the School, two Auditors, and four members of the Managing Committee, in place of those retiring under Rule XIII. (3).

IX. Special meetings of Subscribers may, if necessary, be summoned by the Managing Committee.

THE TRUSTEES.

X. The property of the School shall be vested in three Trustees, who shall be appointed for life, except as hereinafter provided. Vacancies in the number of Trustees shall be filled up at the annual meeting of the Subscribers.

XI. In the event of a Trustee becoming unfit or incapable of acting, he may be removed from his office by a majority of three-fourths of those present at a special meeting of Subscribers summoned by the Managing Committee for that purpose, and another Trustee shall by the same majority be appointed in his place.

XII. In the event of the death or resignation of a Trustee occurring between two annual meetings, the Managing Committee shall have the power of nominating another Trustee to act in his place until the next annual meeting.

THE MANAGING COMMITTEE.

XIII. The Managing Committee shall consist of the following :—

(1) The Trustees of the School.
(2) The Treasurer and Secretary of the School and the Editor of the *Annual*.
(3) Twelve Members elected by the Subscribers at the annual meetings. Of these, four shall retire in each year, at first by lot, afterwards by rotation. Members retiring are eligible for re-election.
(4) The members nominated by Corporate Bodies under Rule VII.

XIV. The Committee shall have control of all the affairs of the School, and shall decide any dispute that may arise between the Director and Students. They shall have power to deprive any Student of the use of the school premises.

XV. The Committee shall meet as a rule once in every two months; but the Secretary may, with the approval of the Chairman and Treasurer, summon a special meeting when necessary.

XVI. Due notice of every meeting shall be sent to each member of the Committee by a summons signed by the Secretary. Three members of the Committee shall be a quorum.

XVII. In case of an equality of votes, the Chairman shall have a second or casting vote.

XVIII. In the event of vacancies occurring among the officers or on the Committee between the annual elections, they may be provisionally filled up by the Committee until the next annual meeting.

HONORARY STUDENTS, HONORARY ASSOCIATES, STUDENTS, AND ASSOCIATES.

XIX. The Students shall consist of the following :—

(1) Holders of travelling fellowships, studentships, or scholarships at any University of the British Empire.
(2) Travelling Students sent out by the Royal Academy, the Royal Institute of British Architects, the Byzantine Research and Publication Fund, or other similar bodies.
(3) Other persons who shall satisfy the Managing Committee that they are duly qualified to be admitted to the privileges of the School.

XX. No person, other than a student of the British School at Rome, shall be admitted as a Student who does not intend to reside at least three months in Greek lands. In the case of Students of the British School at Rome, an aggregate residence of four months at the two Schools will be accepted as alternative to three months' residence in Greece.

XXI. Students attached to the School will be expected to pursue some definite course of study or research in a department of Hellenic studies, and to write in each season a report upon their work. Such reports shall be submitted to the Director, shall by him be forwarded to the Managing Committee, and may be published by the Committee if and as they think proper.

XXII. Intending Students are required to apply to the Secretary. They will be regarded as Students from the date of their admission by the Committee to the 31st day of October next following; but any Student admitted between July 1st and October 31st in any year shall continue to be regarded as a Student until October 31st of the following year.

XXIII. The Managing Committee may elect as Honorary Students or as Honorary Associates of the School such persons as they may from time to time deem worthy of that distinction. They may also elect as Associates of the School any persons actively engaged in study or exploration in Greek lands.

XXIV. Honorary Students, Honorary Associates, Students, and Associates shall have a right to use the Library of the School and to attend all lectures given in connexion with the School, free of charge.

XXV. Students shall be expected to reside in the Hostel provided for them, except with the sanction of the Managing Committee. Priority of claim to accommodation in the Hostel shall be determined by the Committee.

THE DIRECTOR.

XXVI. The Director shall be appointed by the Managing Committee, on terms which shall be agreed upon at the time, for a period of not more than three years. He shall be eligible for re-election.

XXVII. He shall have possession of the school-building as a dwelling-house.

XXVIII. It shall be his duty (1) to guide and assist the studies of Students and Associates of the School, affording them all the aid in his power, and also to see that reports are duly furnished by Students, in accordance with Rule XXI., and placed in the hands of the Secretary before the end of June; (2) to assist in editing the School *Annual*.

XXIX. Public Meetings of the School shall be held in Athens during the season, at which the Director and Students of the School shall read papers on some subject of study or research, and make reports on the work undertaken by the School.

XXX. He may at his discretion allow persons, not Students of the School, to use the Library and attend the public meetings and lectures of the School.

XXXI. He shall be resident at Athens from the beginning of November in each year to the end of the following June, but shall be at liberty to absent himself for short periods for purposes of exploration or research.

XXXII. At the end of each season he shall report to the Managing Committee—(i) on the studies pursued during the season by himself and by each Student; (ii) on the state of the School-premises and the repairs needed for them; (iii) on the state of the Library and the purchases of books, &c., which he may think desirable; and (iv) on any other matter affecting the interests of the School.

XXXIII. In case of misconduct the Director may be removed from his office by the Managing Committee by a majority of three-fourths of those present at a meeting specially summoned for the purpose. Of such meeting at least a fortnight's notice shall be given.

THE ASSISTANT DIRECTOR AND LIBRARIAN.

XXXIV. The Assistant Director shall be appointed by the Managing Committee, on terms which shall be agreed upon at the time, for a period of not more than three years. He shall be eligible for re-election.

XXXV. It shall be his duty to take charge of the Library and to be responsible for the Hostel, subject to the Director's approval and control, and otherwise help if required in the management of the School.

RULES FOR THE MACMILLAN HOSTEL.

XXXVI. The Director shall have power to exclude a Student from the Hostel in case of misconduct; but such exclusion must be immediately reported to the Managing Committee.

XXXVII. The Students shall pay an entrance fee of £2 2*s*. per session, and a fixed charge of 3*s*. a night or £1 a week for the small rooms in the Hostel. Two Students sharing a large room shall pay a reduced charge. These payments shall include fire, lighting, and the necessary servants' wages. Students shall also be required to pay the cost of their messing.

XXXVIII. Honorary Students, Honorary Associates, Associates, Members of the Committee, and ex-Directors may be admitted to residence in the Hostel. Other persons, if seriously engaged in study or research, may be admitted by the Director at his discretion. But no person shall reside in the Hostel under this rule to the exclusion of any Student desiring admission.

XXXIX. Residents other than Students or Associates shall pay an entrance fee of £2 2*s*. for any period up to three months, or £5 5*s*. per session, and a fixed charge of 6*s*. a night or £2 a week and the cost of messing. Associates shall be admitted to the Hostel at Student rates.

THE VILLA ARIADNE AT KNOSSOS.

XL. The Archaeological Curator at Knossos shall be appointed [1] by the Managing Committee for a period of not more than three years. He shall be eligible for re-election.

XLI. It shall be his duty (1) to reside generally at the Villa Ariadne from February 15th to August 15th; (2) to supervise the house and property generally and to see that the Palace and other excavated buildings are properly cared for.

XLII. He shall hold with regard to the Director of the School, the same position as the Assistant Director.

XLIII. Students residing at the Villa, and not engaged on an actual School excavation, shall pay the same charges as in the Hostel at Athens. With regard to the "Taverna," special arrangements will be made.

RULES FOR THE LIBRARY.

XLIV. The Director shall have power to make rules for the management of the Library, its use by Students, and the like; such rules to be subject to the approval of the Managing Committee.

PUBLICATION.

XLV. No publication whatever, respecting the work of the School, shall be made without the previous approval of the Committee. The Committee of the School shall have the first claim upon any written work done by a Student from material collected during the tenure of a Studentship at the School or with the aid of a grant from the School, and also upon the reports of excavations conducted under an official permit obtained through the School. No such work may be published elsewhere than in the *Annual* of the School without the previous consent of the Committee; always provided that such consent shall not be unreasonably withheld.

THE FINANCES.

XLVI. All money received on behalf of the School beyond what is required for current expenses shall be invested in the names and at the discretion of the Trustees.

XLVII. The banking account of the School shall be placed in the names of the Treasurer and Secretary, who shall sign cheques jointly.

XLVIII. The first claim on the revenue of the School shall be the maintenance and repair of the School premises in Athens and the Villa Ariadne, and the payment of rates, taxes, and insurance.

XLIX. The second claim shall be the salaries of the Director and other officials of the School, as arranged between them and the Managing Committee.

Revised, 1932.

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[1] Subject to the approval of Sir Arthur Evans.

MANAGING COMMITTEE, 1931–1932 and 1932–33.

Edwin Hanson Freshfield, Esq.
George A. Macmillan, Esq., D.Litt., *Chairman.* } *Trustees.*
V. W. Yorke, Esq., M.A., *Hon. Treasurer.*
Professor J. D. Beazley, M.A. Appointed by the University of Oxford.
Professor D. S. Robertson, M.A. Appointed by the University of Cambridge.
M. S. Thompson, Esq., M.A. Appointed by the Hellenic Society.
H. M. Fletcher, Esq., F.R.I.B.A. Appointed by the Royal Institute of British Architects.
Mrs. Culley, M.A., *ex-officio* as joint editor of the *Annual.*
Professor Bernard Ashmole, M.A.
Professor R. M. Dawkins, M.A.
Professor J. P. Droop, M.A.
Sir Arthur Evans, D.Litt., LL.D.
E. J. Forsdyke, Esq., M.A., F.S.A.
Professor E. A. Gardner, Litt.D.
Principal W. R. Halliday, M.A., LL.D. } Appointed by the Subscribers.
Miss W. Lamb.
Professor J. Linton Myres, M.A.
M. N. Tod, Esq., O.B.E., M.A., F.B.A.
A. J. Toynbee, Esq., B.A.
A. J. B. Wace, Esq., M.A.
L. Whibley, Esq., M.A.
W. R. Le Fanu, Esq., M.A., *Secretary,* 50, Bedford Square, W.C. 1.

MANAGING COMMITTEE, 1933–34

Edwin Hanson Freshfield, Esq.
George A. Macmillan, Esq., D.Litt. } *Trustees.*
V. W. Yorke, Esq., M.A., *Hon. Treasurer.*
Professor J. D. Beazley, M.A. Appointed by the University of Oxford.
Professor D. S. Robertson, M.A. Appointed by the University of Cambridge.
M. S. Thompson, Esq., M.A. Appointed by the Hellenic Society.
H. M. Fletcher, Esq., F.R.I.B.A. Appointed by the Royal Institute of British Architects.
T. C. Skeat, Esq., B.A., *ex-officio* as joint editor of the *Annual.*
Professor Bernard Ashmole, M.A.
Mrs. Culley, M.A.
Professor R. M. Dawkins, M.A.
Professor J. P. Droop, M.A.
Sir Arthur Evans, D.Litt., LL.D.
E. J. Forsdyke, Esq., M.A., F.S.A.
Professor E. A. Gardner, Litt.D. } Appointed by the Subscribers.
Principal W. R. Halliday, M.A., LL.D.
Miss W. Lamb.
Professor J. Linton Myres, M.A., *Chairman.*
M. N. Tod, Esq., O.B.E., M.A., F.B.A.
A. J. Toynbee, Esq., B.A.
A. J. B. Wace, Esq., M.A.
L. Whibley, Esq., M.A.
W. R. Le Fanu, Esq., M.A., *Secretary,* 50, Bedford Square, W.C. 1.

Hon. Treasurer, V. W. Yorke, Esq., M.A., Farringdon Works, Shoe Lane, E.C. 4.

DIRECTOR
H. G. G. Payne, Esq., B.A.

ASSISTANT DIRECTOR 1931–1932
W. A. Heurtley, Esq., O.B.E., B.A.

ARCHAEOLOGICAL CURATOR AT KNOSSOS
J. D. S. Pendlebury, Esq., M.A.

ARCHITECT TO THE SCHOOL 1931–1932.
P. de Jong, Esq.

British School at Athens.

THE School was founded in 1886 to provide British students of Greek literature, art, archaeology and history with the opportunity of pursuing their researches in Greece itself, with the command of the means which recent great advances of knowledge have rendered indispensable.

The School buildings at Athens are situated on the slopes of Lycabettus on ground presented by the Greek Government. They consist of a house for the Director, and the Macmillan Hostel with accommodation for the Assistant Director and students. Adjoining the hostel is the Penrose Library (so called after the first Director of the School), which contains over 9,000 volumes, classical texts, histories, works on art, archaeology and topography, a rich series of maps, and archaeological periodicals. In the common room of the hostel is housed the Finlay Library, which formerly belonged to George Finlay, the historian of Byzantine and Modern Greece. This collection includes many rare pamphlets, and MSS. dealing with the period of the Greek Revolution, and a collection of Byroniana.

Facilities are afforded for using the libraries and attending the lectures of the other foreign schools, and by the kindness of the Greek Archaeological Service permits are granted giving Students free access to the Museums.

In 1926 Sir Arthur Evans, with the consent of the Greek Government, presented to the Trustees of the School his properties in Crete, including the Villa Ariadne and the site of the Palace at Knossos. He further endowed his gift in order to provide for the upkeep of the Palace and for the maintenance of an Archaeological Curator, who resides in the Villa Ariadne from February to August each year. He has also (1933) renovated the old 'Taverna' in the garden of the Villa so as to provide residential accommodation for the use, at any time, of one or two members of the School independently studying the antiquities of the spot. A library is being formed in the Villa for the use of students working in Crete.

The School at Athens is open from November 1st until July 1st, during which time either the Director or Assistant Director is in residence.

Any duly qualified British subject may be admitted as a member of the School, and Students of the British School at Rome have the privilege of admission as a matter of course.

A Studentship (value £100) is offered each year to the Universities of Oxford and Cambridge alternately; about every three years the Gustav Sachs Memorial Studentship (value £100) is open to all Universities in the British Isles; and a Studentship (value £200 per annum), founded in 1928 by Mr. George Macmillan, is tenable for two years by a man of British nationality.

Holders of Travelling Fellowships, Studentships or Scholarships at any University of the British Empire, and Travelling Students sent out by the Royal Academy, the Royal Institute of British Architects, the Byzantine Research and Publication Fund, or other similar bodies, are also admitted as Students.

Students, except for an entrance fee of £2 2*s.* per session, have to pay only a rent for their rooms and the cost of their messing. The cost of living in 1933 was about 5*s.* per day, 2*s.* 6*d.* for food alone.

All Students are normally required to pursue a definite course of study and to reside in Greek lands for at least three months. The Committee, however, is accustomed to modify these regulations in the case of resident members of the Universities, whose time is necessarily limited, and in the case of Students of the School at Rome.

All applications for admission by intending Students should be made to the Secretary, British School at Athens, 50, Bedford Square, London, W.C. 1.

Archaeological excavation is carried on each year by the Director with members of the School. The list of excavations made by the School includes Megalopolis, Sparta, Mycenae, sites in Cyprus, Thessaly, and Boeotia, Phylakopi in Melos and in Crete Palaikastro and the Dictaean Cave. The results of these excavations, with reports of the other work of the School, are published in the *Annual of the British School at Athens.*

Apart from a Government subsidy of £500, the School is entirely dependent on donations and subscriptions from individuals and from corporate bodies, academic and others.

Individual subscribers of £2 per annum or donors of £20 to the General Fund of the School receive the current volume of the *Annual* free of charge; subscribers of £1 or donors of £10 are entitled to purchase a copy for an additional £1. (The published price is about £3 3*s.*)

Any subscriber, when in Athens, is entitled to the full use of the Library.

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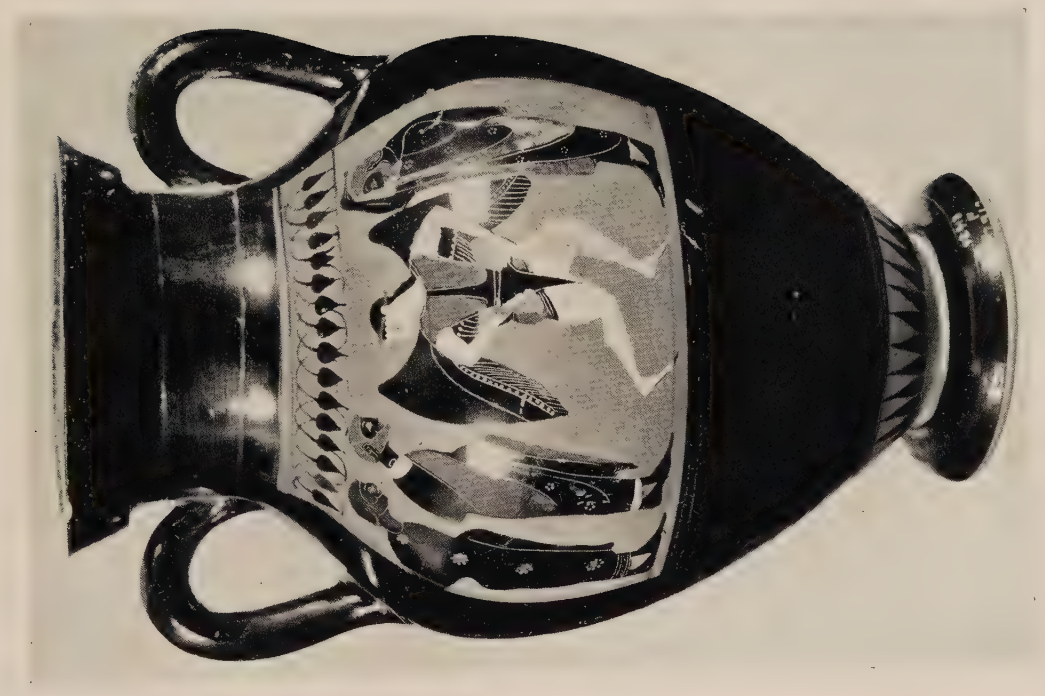

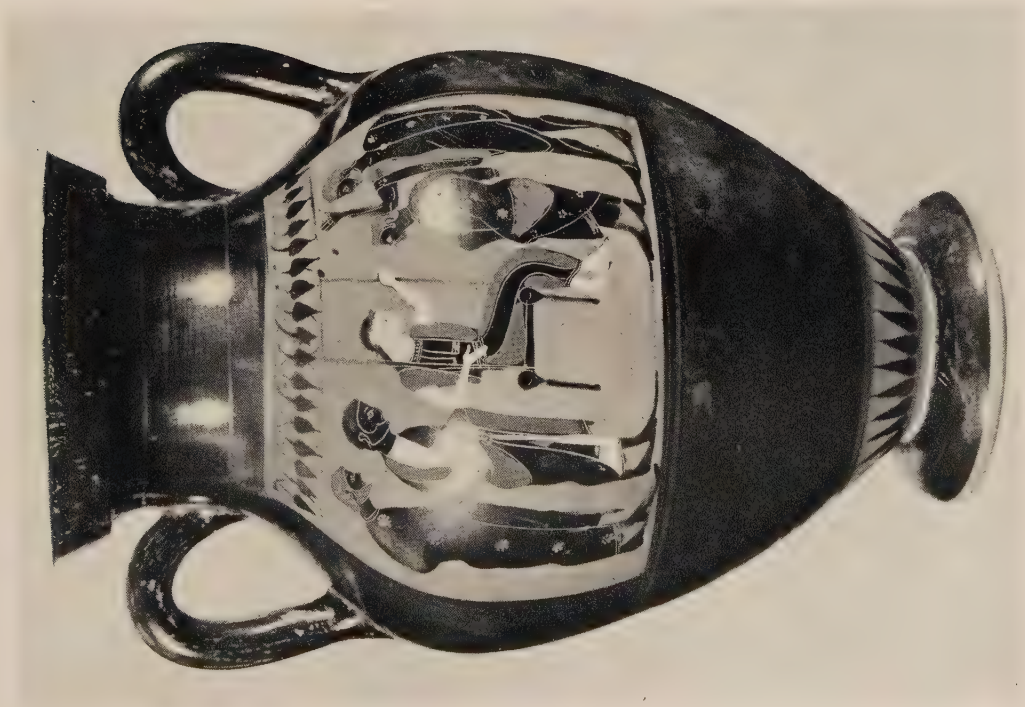

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a.

b.

c.

d.

e.

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c. Montpellier 129.

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PLATE 9.

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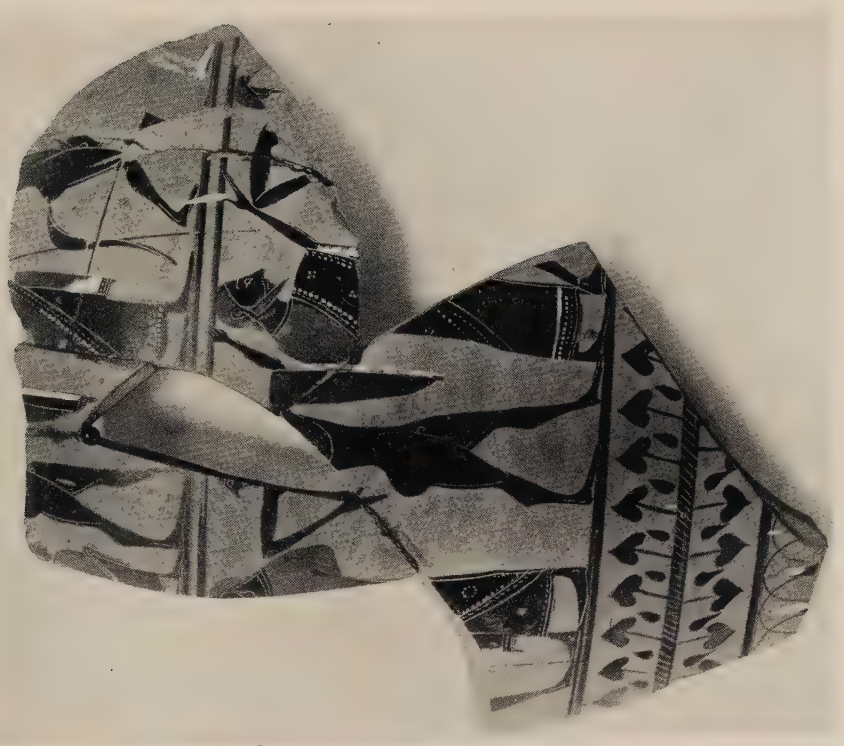

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1. Bonn 504.

ARGIVE FIGURINES.

1. A 4. Argos Museum.
2–4. Class B: 2. Argive Heraeum. 3, 4. Perachora.
5. Cleobis. Delphi Museum

(Scale:—1*a*, 1 : 2; remainder (exc. 5), 1 : 1.)

ARGIVE FIGURINES.

Class C: 1. Argos (Larisa). 2, 5, 6. Argive Heraeum.
3. Perachora. 4. Selinus.
(Scale (exc. 4) *ca.* 1 : 1.)

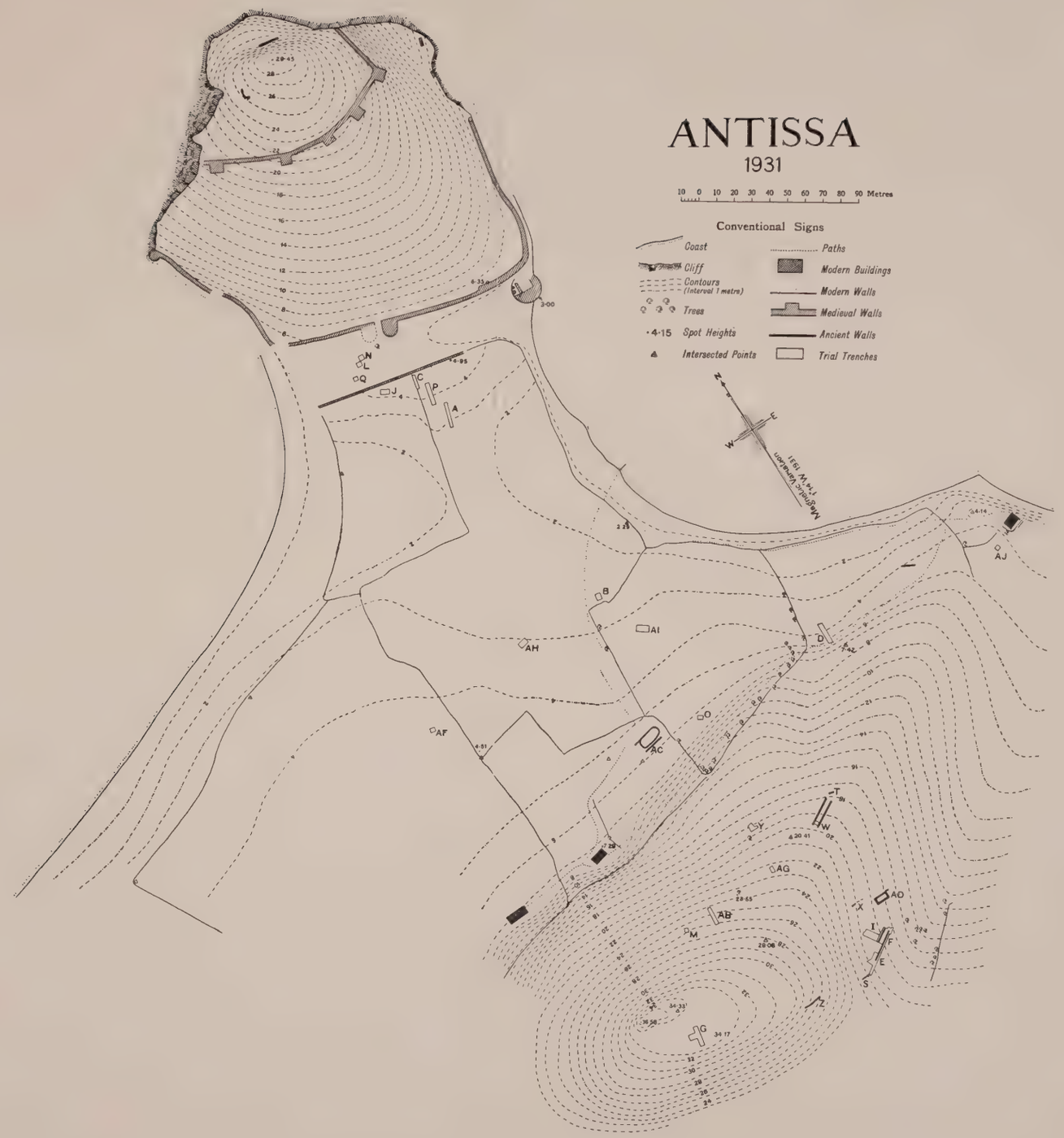
ARGIVE FIGURINES.
1. Perachora (Class D).
2–5. Class E: 2, Argive Heraeum. 3, 4, 5. Perachora.
(Scale *ca.* 1 : 1.)

ARGIVE FIGURINES.
CLASS F ('ORNATE' STYLE).
1, 3, 4, 7. Argive Heraeum.
2, 5, 6. Perachora.
(Scale *ca.* 2 : 3.)

ARGIVE AND CORINTHIAN FIGURINES.

L.C. I: 1, 3. Perachora. 2. Tegea.
CLASS G: 4, 5. Argolid. 6. Tegea.
L.C. III: 7. Argive Heraeum (L.C. II–III).
8, 9. Perachora.

(Scale *ca.* 1 : 1.)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Coast
Cliff
Contours (Interval 1 metre)
Trees
·4·15 Spot Heights
Intersected Points
Paths
Modern Buildings
Modern Walls
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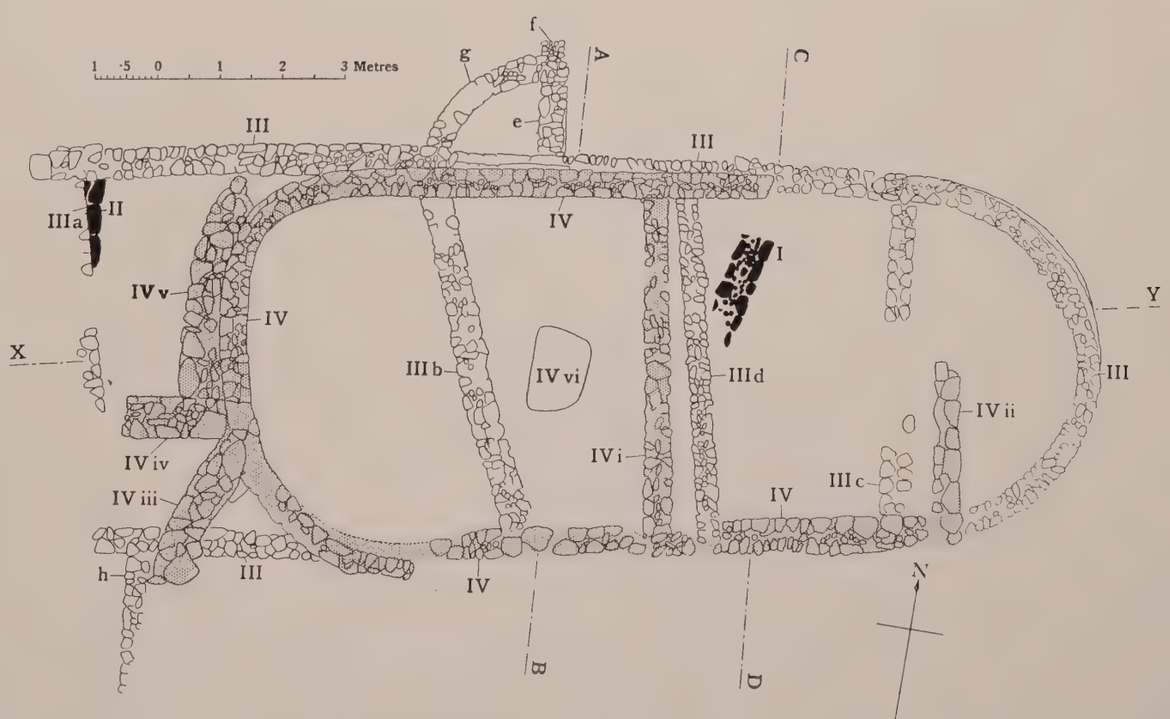
Antissa: AC. Later Walls and Stoa.



Antissa: AC. Early Apsidal Building (Unshaded) and Later Apsidal Building (Stippled).

PLATE 18.

1. Apsidal Buildings, looking East.

2. Apsidal Buildings, looking West.

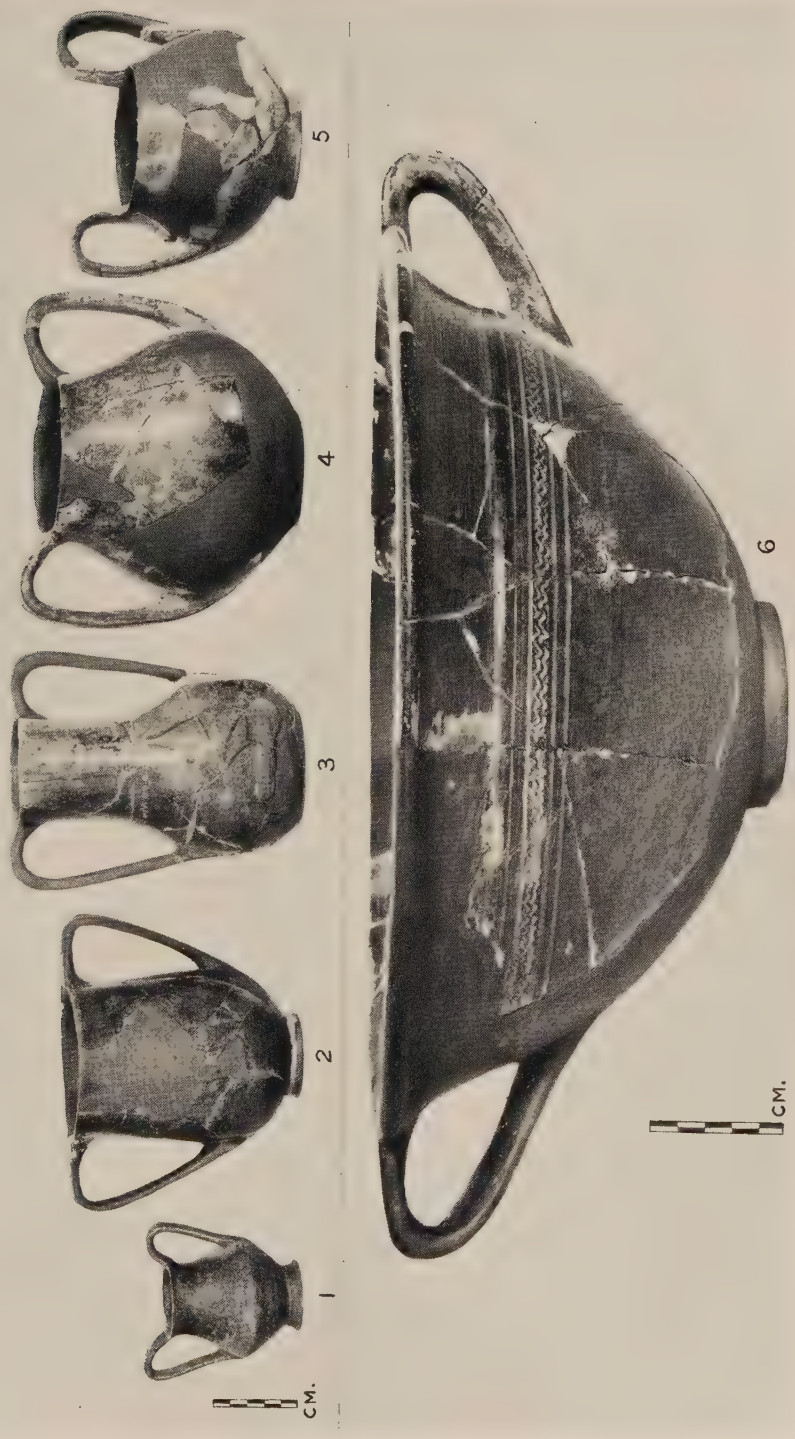
3. Blocked doorway and cross walls.

4. West apse; wall V; altar.

5. Paved area.

6. East apse.

ANTISSA: AC. APSIDAL BUILDINGS AND OTHER WALLS.



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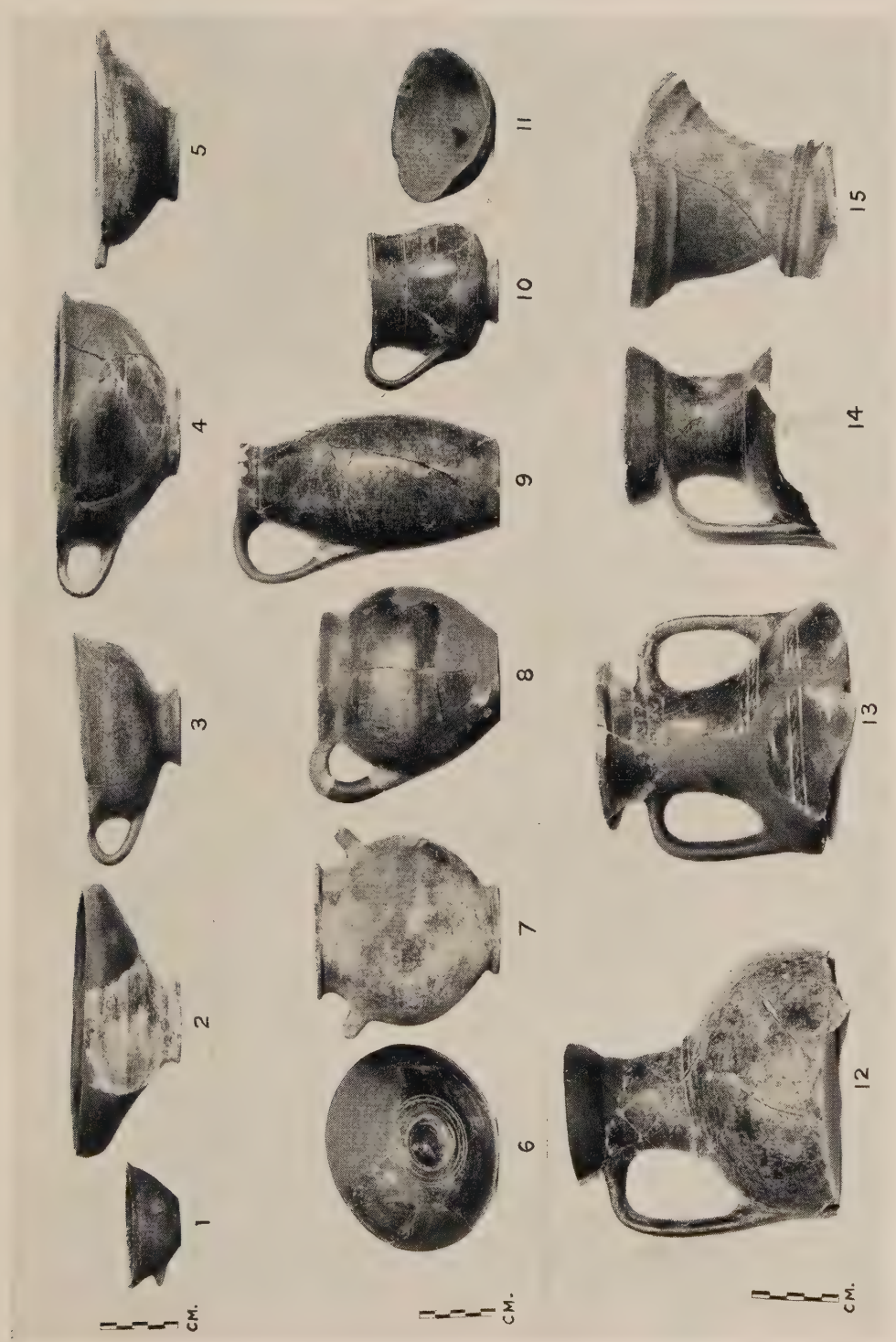


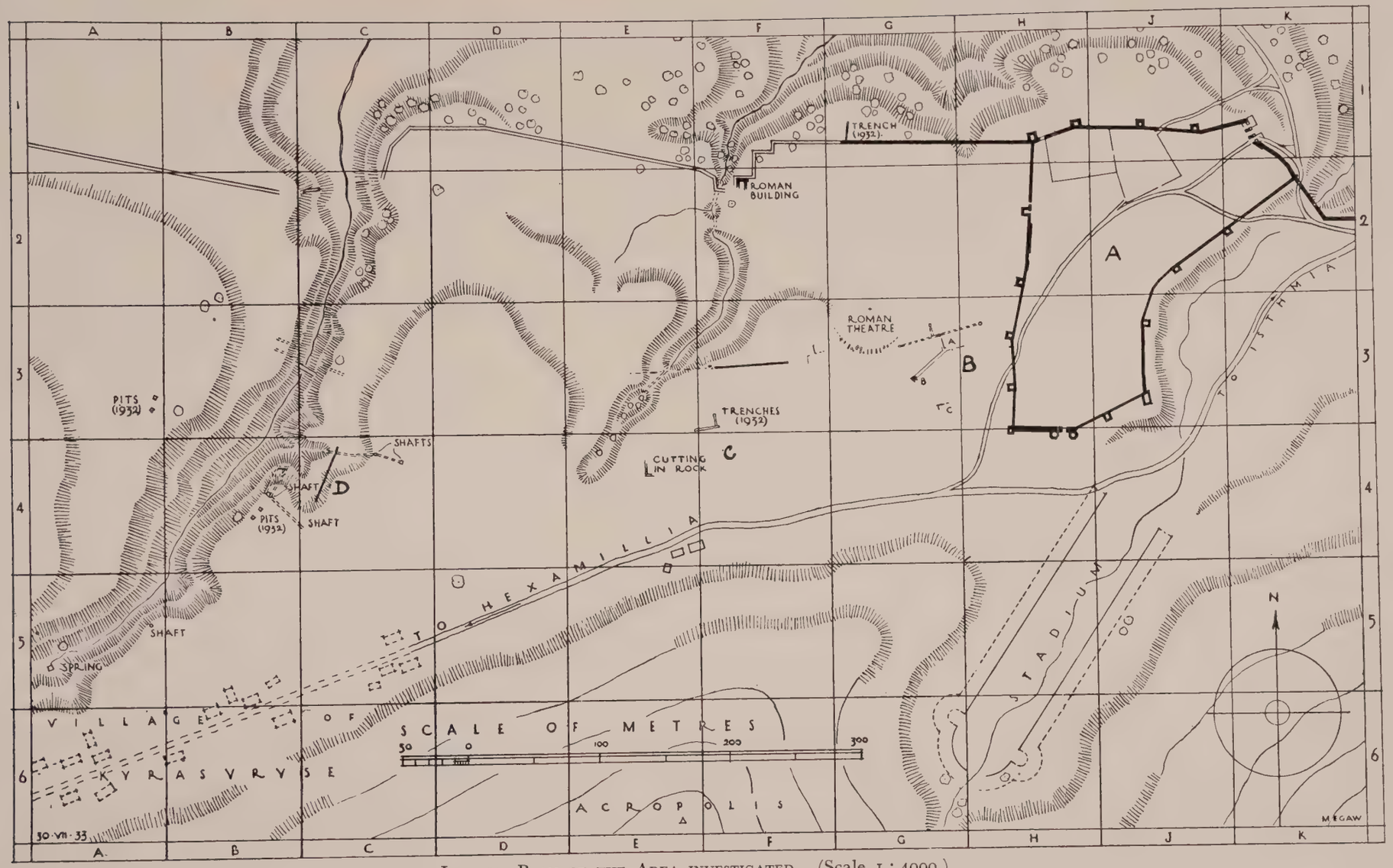
ANTISSA: BUCCHERO VASES.

ANTISSA: BUCCHERO FRAGMENTS.

Antissa: Imported Pottery.

Antissa: Imported Pottery and Lesbian Bucchero.

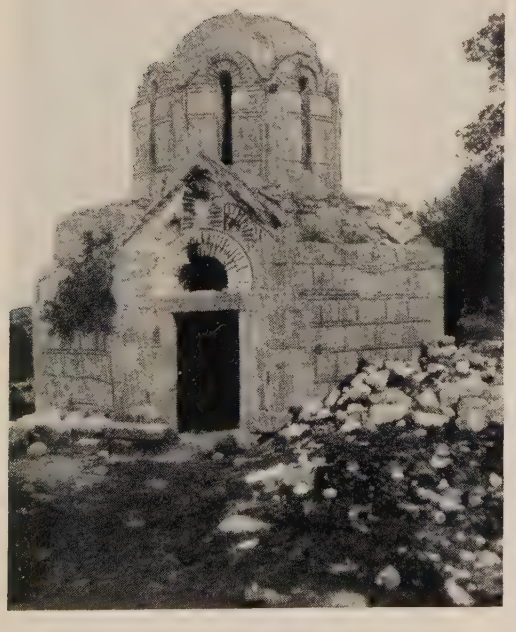
ANTISSA: TERRACOTTAS AND STONE BOWL.



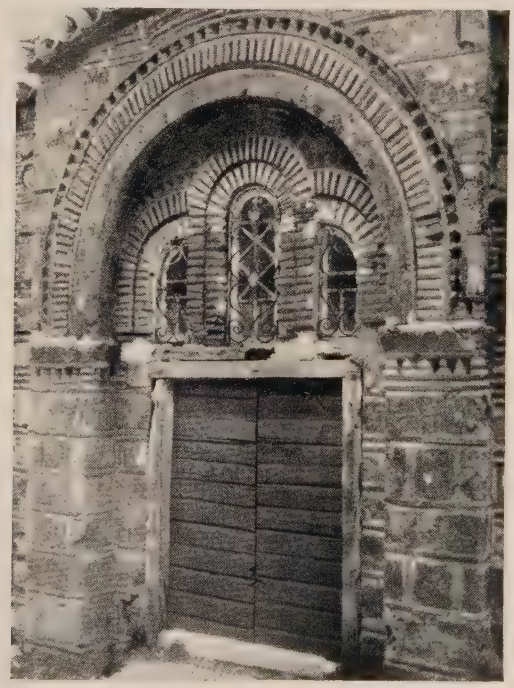
Isthmia, Plan of the Area investigated. (Scale 1 : 4000.)

1. Athens, H. Aikaterine: from South.

2. Athens, Kapnikarea: from South-East.



3. Boeotia, Loukisia: from West.



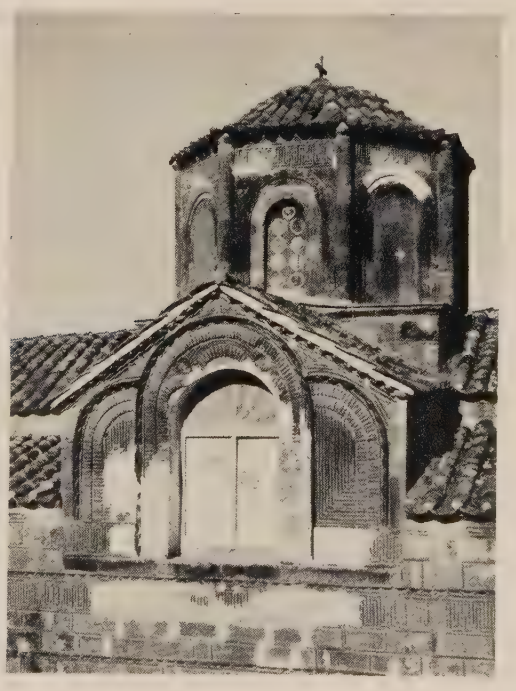
4. Amphissa, H. Soter: West End.

MIDDLE-BYZANTINE CHURCHES.

1. Amphissa, H. Soter: East End.

2. Attica, Ioannes Kynegos: from North.

3. Argolis, Hagia Mone: Centre Apse.



4. Argolis, Hagia Mone: South Gable.

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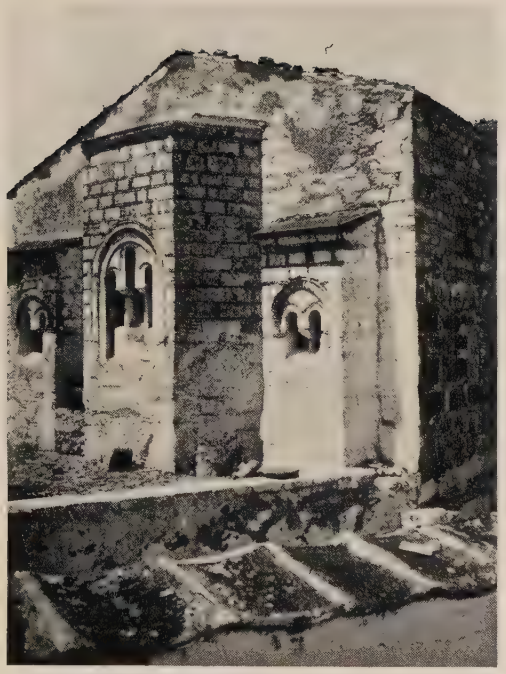

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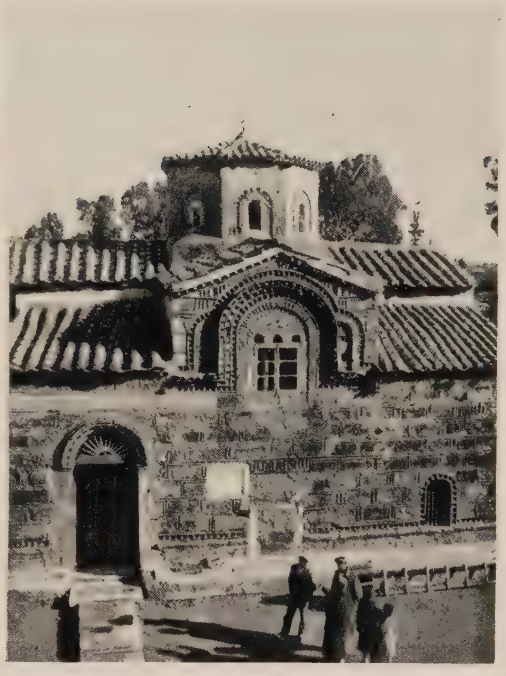

2. Elis, Gastoune: from South.

3. Elis, Gastoune: The Apse.

4. Attica, Sykaminon: H. Eleousa.

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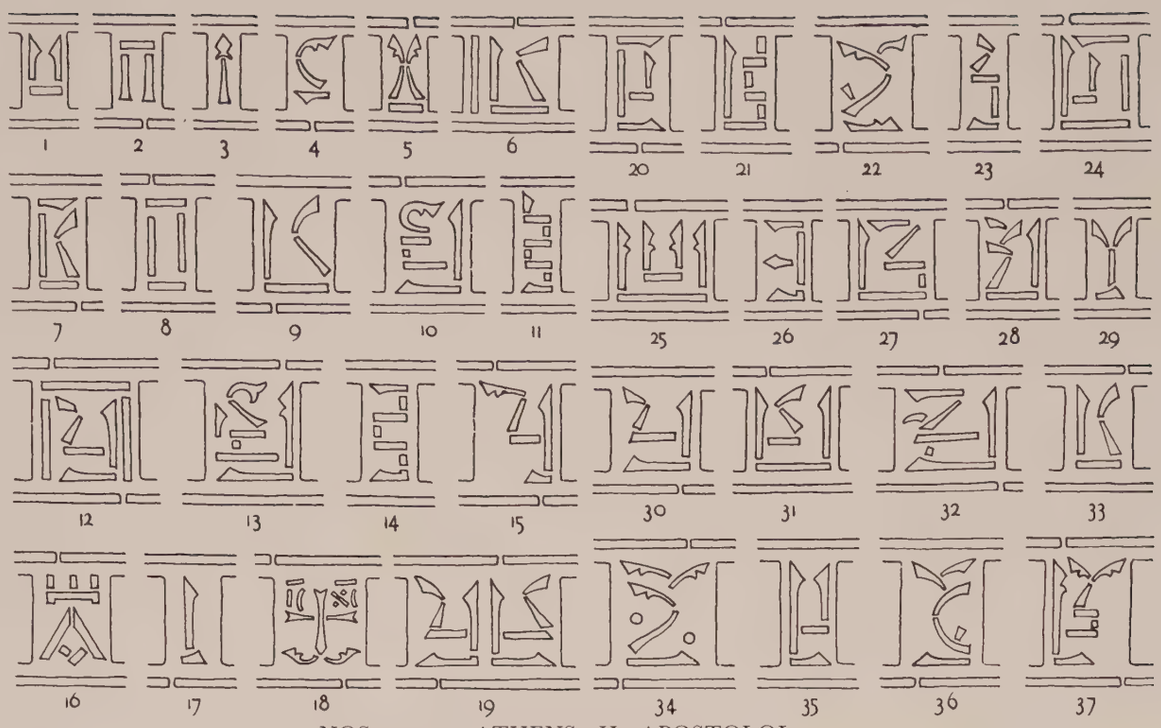

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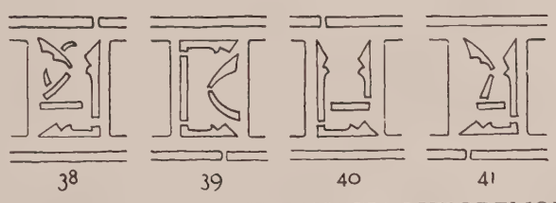

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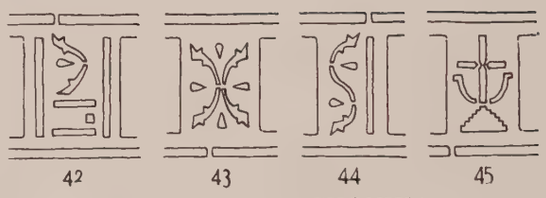

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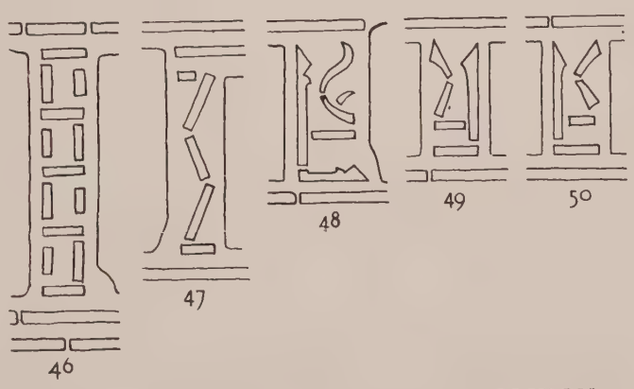

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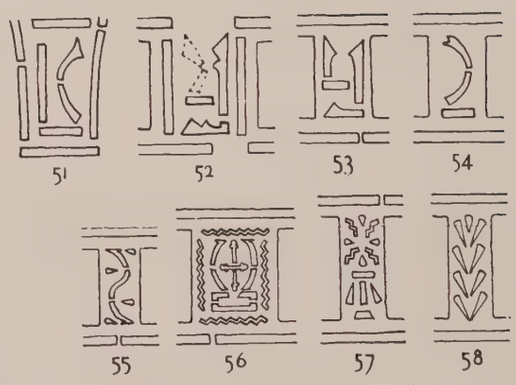
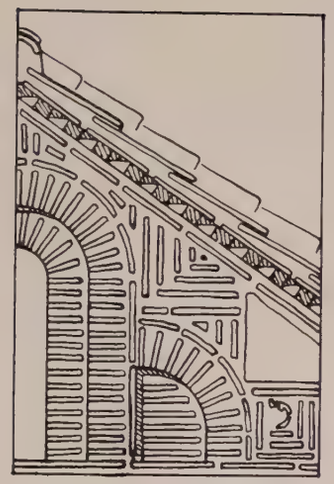


NOS. 55–58: AMPHISSA.

PLATE 30.

MIDDLE-BYZANTINE CHURCHES: CUT BRICK PATTERNS. (Scale 1 : 15.)



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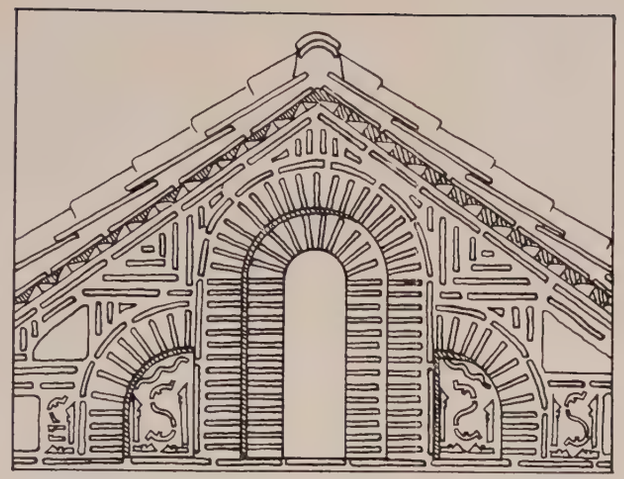

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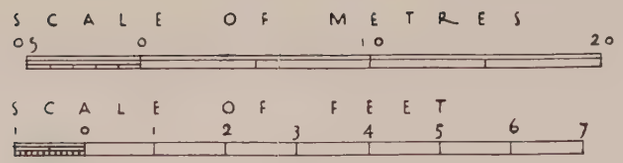
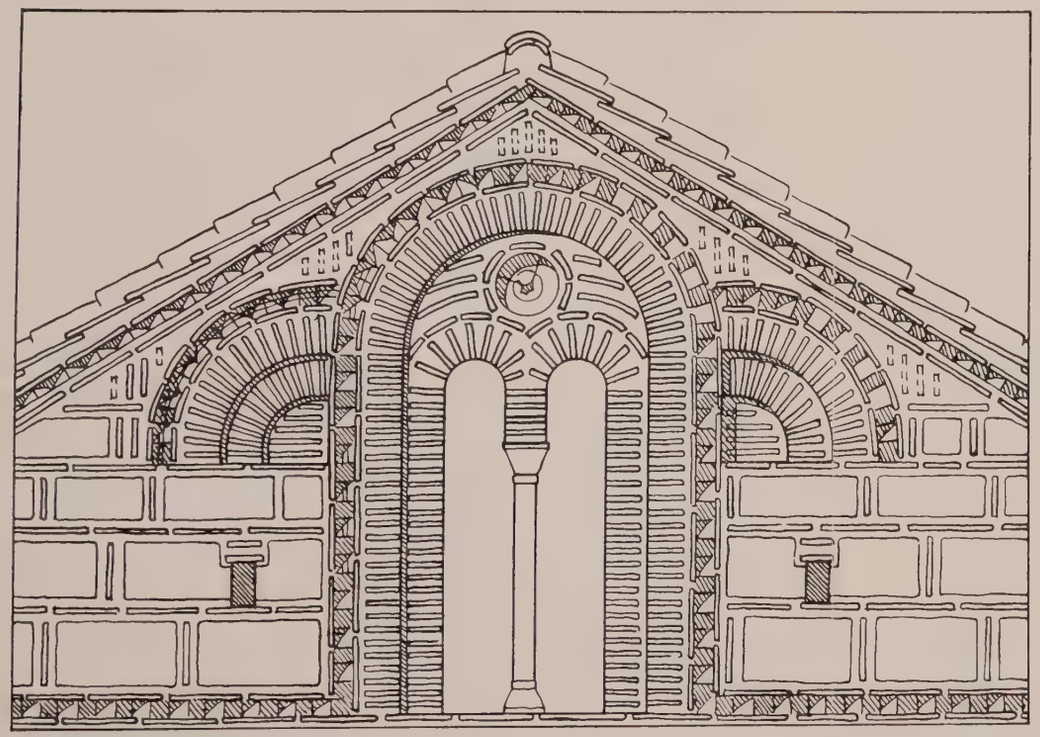
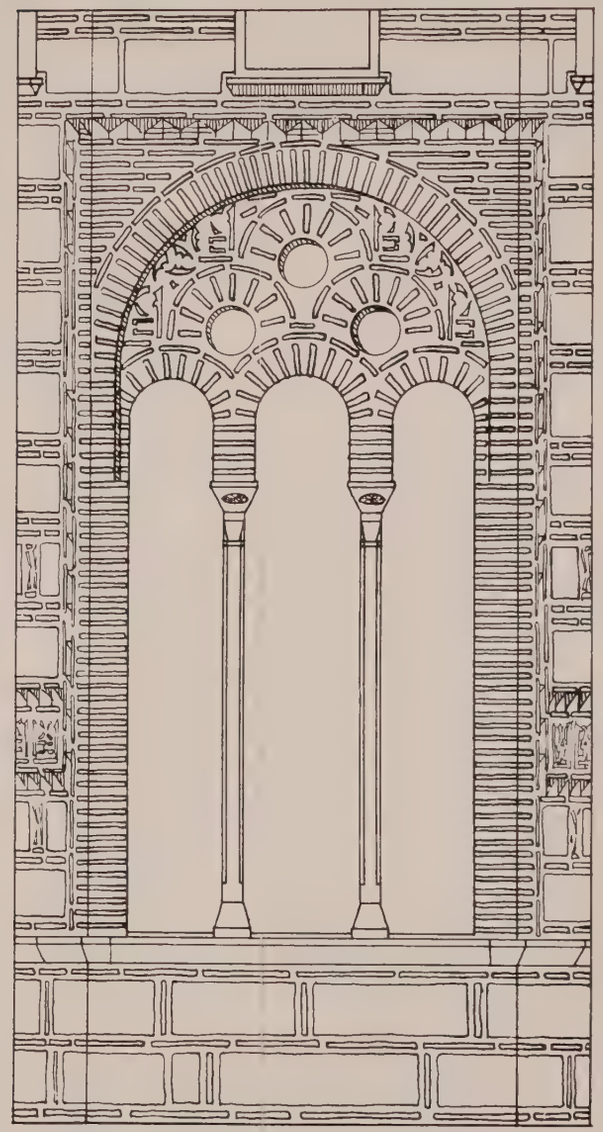




3. Athens, H. Theodoroi: West Gable Window.



4. Athens, Panagia Lykodemou: Centre Apse Window.

MIDDLE-BYZANTINE CHURCHES: Window Details. (Scale 1 : 30.)

1.—Korakou Bridge.

2.—Looking S. from just below W. Summit of Tymphrestus Pass. (Alt. 4000 ft.)

3.—Tatárna Bridge.

1.—Mt. Tomarus and Dodona (marked by arrows).

2.—View N. from Vítzista Ridge, up Achelous Valley towards Zýgos. (Alt. 4000 ft.)

1.—View S. from Vítzista Ridge over Parachelois. (Alt. 4000 ft.)

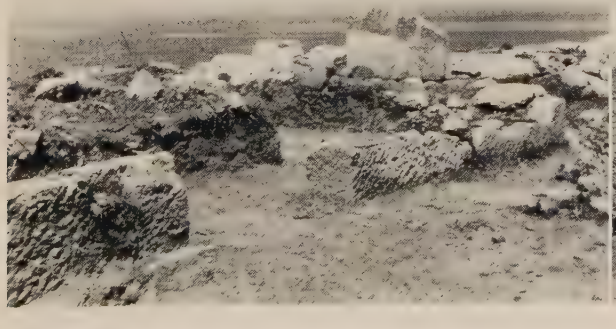
2.—View E. from head of Kalarýtes-Halíki Pass; the Upper Achelous is visible. (Alt. 5000 ft.)

1. Temple foundations and entrance to precinct, from the West.

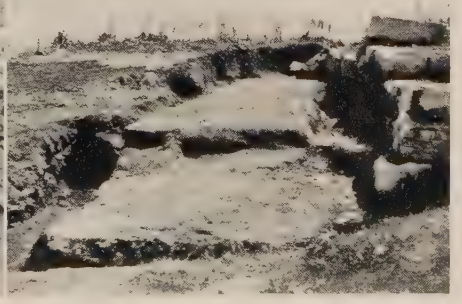
2. Entrance to precinct, shewing paved passage.

3. Long Hall, interior, from S.W. corner.

4. Long Hall, stone bases.



5. N. doorway of Long Hall, from without.

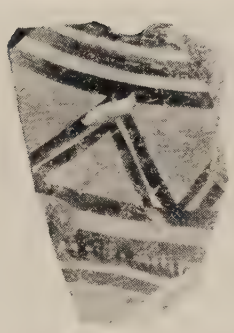


6. Foundations of older Temple (?) from W.

Excavations at Haliartos.

HALIARTOS: GORGON FRAGMENTS AND PAINTED ANTEFIX.

1.



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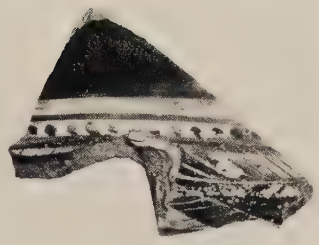
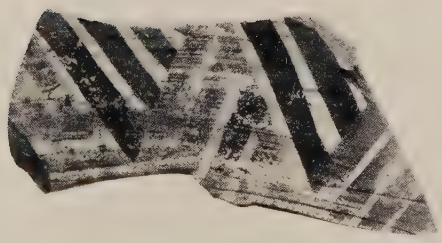


3.

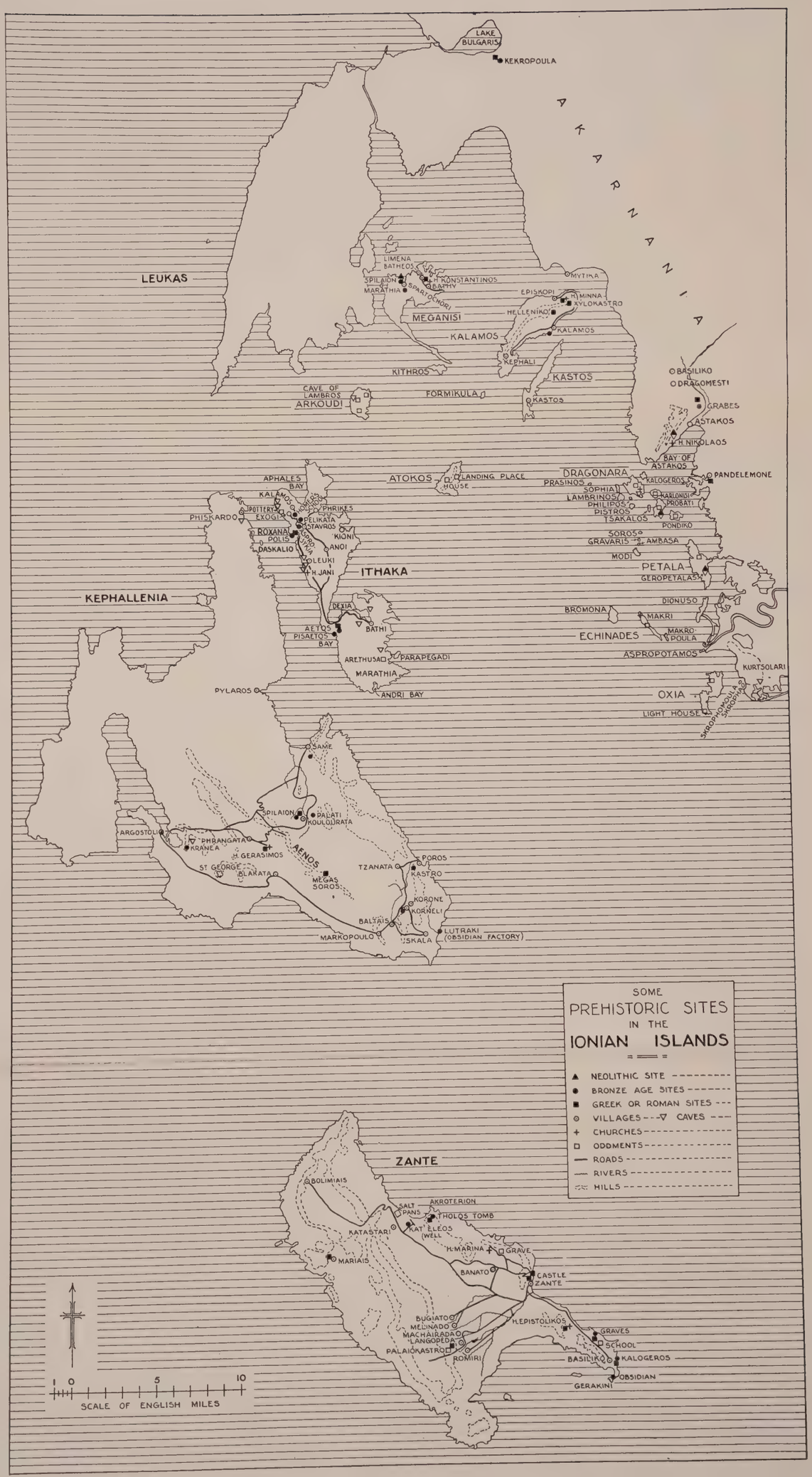
4.

5.



6.

HALIARTOS: 1. Corinthian (Scale 3 : 5). 2. Boeotian kylix (?) (Scale 2 : 3).
3. Laconian (Scale 3 : 5). 4. Inscribed sherds (Scale 1 : 2).
5. Fragment of leg of bronze tripod (Scale 1 : 4)
6. Sherd of undetermined fabric (Scale 1 : 2).


SOME
PREHISTORIC SITES
IN THE
IONIAN ISLANDS
NEOLITHIC SITE
BRONZE AGE SITES
GREEK OR ROMAN SITES
VILLAGES
CAVES
CHURCHES
ODDMENTS
ROADS
RIVERS
HILLS
SCALE OF ENGLISH MILES
LEUKAS
KEPHALLENIA
ITHAKA
ZANTE
AKARNANIA
LAKE BULGARIS
KEKROPOULA
LIMENA
BATHEOS
SPILAION
MARATHIA
H. KONSTANTINOS
BATHY
SPARTOCHORI
MEGANISI
MYTIKA
EPISKOPI
H. MINNA
XYLOKASTRO
HELLENIKO
KALAMOS
KEPHALI
KITHROS
KASTOS
CAVE OF LAMBROS
ARKOUDI
FORMIKULA
BASILIKO
DRAGOMESTI
GRABES
ASTAKOS
H. NIKOLAOS
BAY OF ASTAKOS
PANDELEMONE
DRAGONARA
KALOGEROS
PRASINOS
SOPHIA
LAMBRINOS
KARLONISI
PROBATI
PHILIPOS
PISTROS
TSAKALOS
PONDIKO
SOROS
GRAVARIS
AMBASA
MODI
PETALA
GEROPETALAS
DIONUSO
BROMONA
MAKRI
ECHINADES
MAKRO-POULA
ASPROPOTAMOS
KURTSOLARI
OXIA
LIGHT HOUSE
SKROPHOMOULA
SKROPHA
ATOKOS
LANDING PLACE
HOUSE
APHALES BAY
KALAMOS
POTTERY
EXOGI
PHRIKES
PELIKATA
STAVROS
PHISKARDO
ROXANA
POLIS
DASKALIO
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DEXIA
BATHI
AETOS
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PARAPEGADI
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ANDRI BAY
PYLAROS
SAME
SPILAION
PALATI
KOULOURATA
ARGOSTOLI
PHRANGATA
KRANEA
H. GERASIMOS
ST GEORGE
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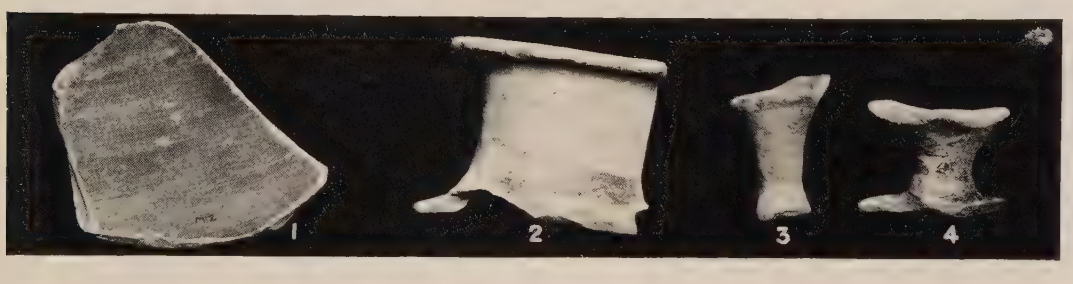
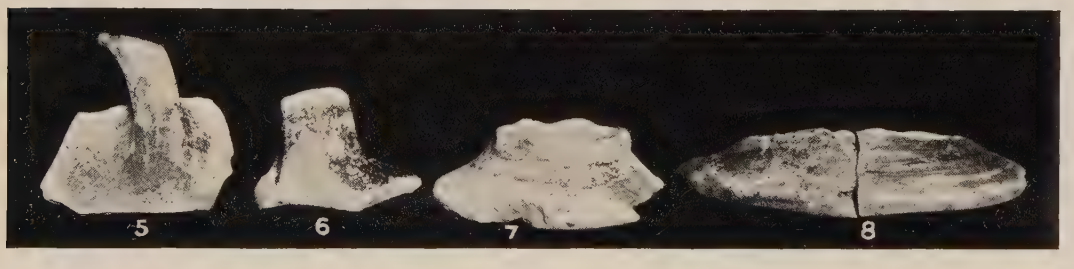
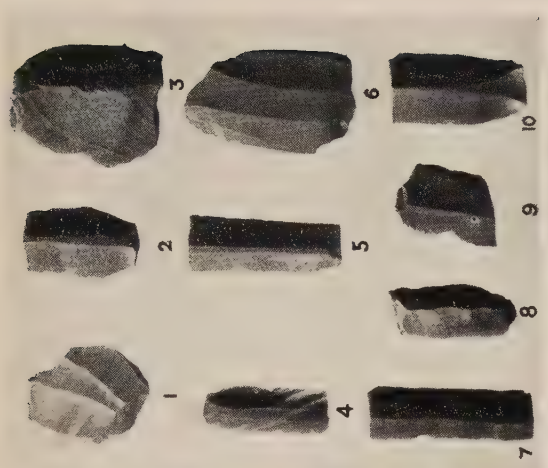
MEGAS SOROS
TZANATA
POROS
KASTRO
KORONE
KORNELI
BALTAIS
MARKOPOULO
USKALA
LUTRAKI (OBSIDIAN FACTORY)
BOLIMIAIS
SALT PANS
AKROTERION
THOLOS TOMB
KATASTARI
KAT' ELEOS (WELL
H. MARINA
GRAVE
MARIAIS
BANATO
CASTLE
ZANTE
BUGIATO
MELINADO
MACHAIRADA
LANGOPEDA
PALAIOKASTRO
ROMIRI
H. EPISTOLIKOS
GRAVES
SCHOOL
BASILIKO
KALOGEROS
OBSIDIAN
GERAKINI

PLATE 38.

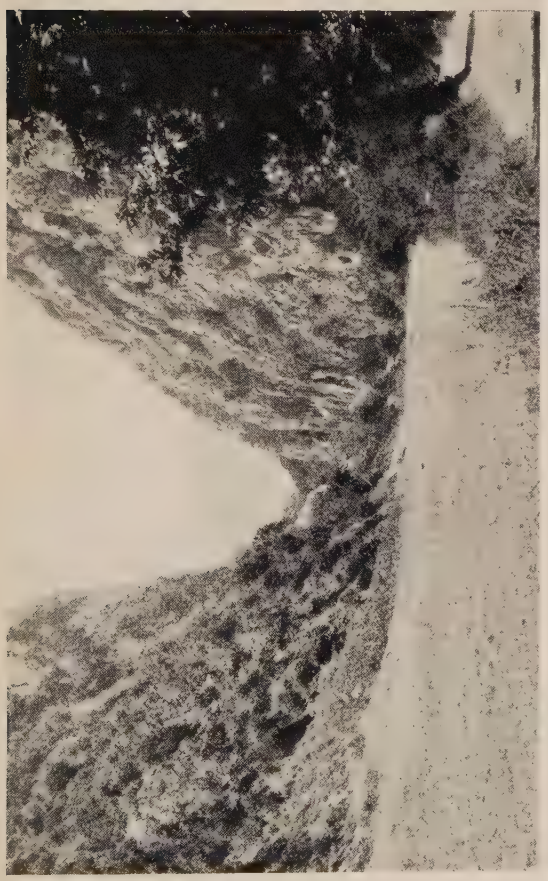




THE IONIAN ISLANDS: 1. CAPE KALOGEROS, ZAKYNTHOS. 2. MYCENAEAN POTTERY FROM ZAKYNTHOS. Scale 1 : 4 (Nos. 1–8), 1 : 3 (Nos. 9–10), 1 : 6 (No. 11).



b.



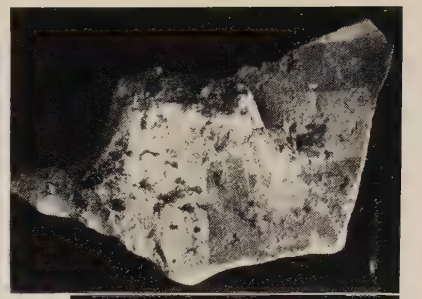
a.

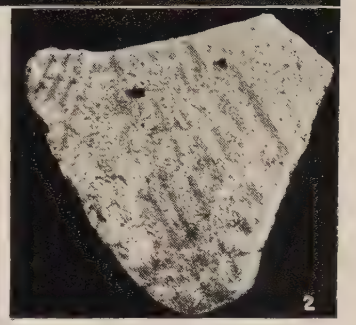
d.

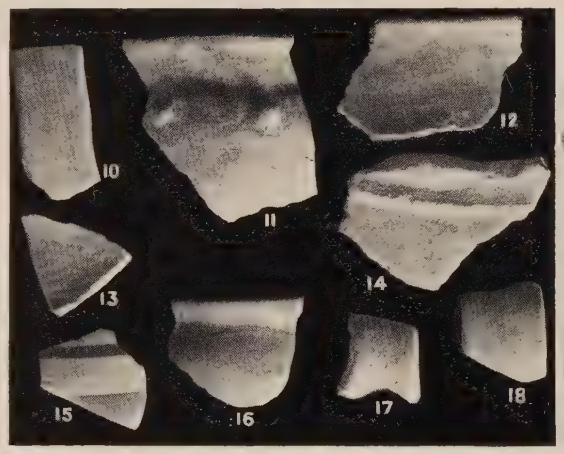
c.

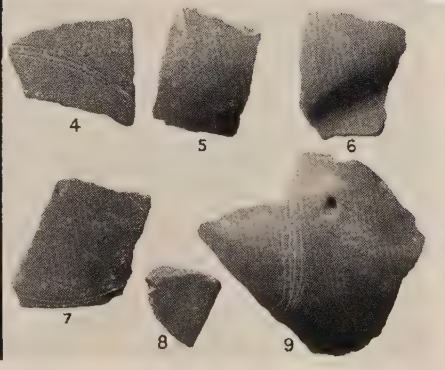
a. Pass at Poros, Kephallenia.
b. Obsidian from Zakynthos and Kephallenia. Scale 1 : 1.

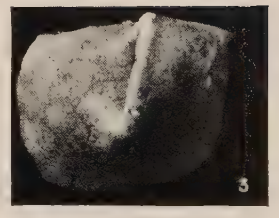
c. Minyan Kantharos from Kankalisais, Kephallenia.
d. *Pinus Cephalensis* on Mt. Aenos.



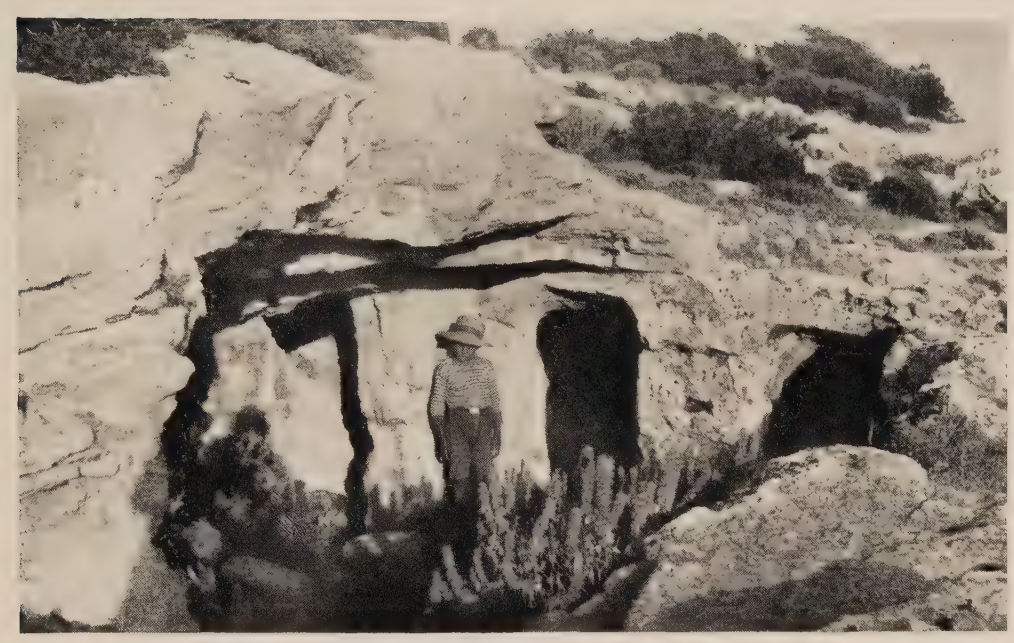








The Ionian Islands: View of Meganisi, and Pottery from Meganisi and (Nos. 10–18) Kephallenia. Scale 5:6 (No. 1), 1:2 (Nos. 2–3), 3:7 (Nos. 4–9), 1:3 (Nos. 10–18).



a.

b.

c.

THE IONIAN ISLANDS: *a.* ROCK-CUT TOMBS, ASPRÓGA, KYTHERA.
b. LIFE-SIZE MARBLE LION, KYTHERA.
c. STONE LAMP (L.M. II.) KYTHERA. Scale *ca.* 1 : 4.

BIBL.
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UNIV.